

MAINTENANCE MANUAL VOLUME 2

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MEMORANDUM

To: ALL MAINTENANCE MANUAL HOLDERS

From: DEPARTMENT OF TRANSPORTATION
Chief, Division of Maintenance

Subject: Maintenance Manual Volume 2

Attached is the newly revised issue of Maintenance Manual Volume 2, which has been updated to reflect the changes resulting from the implementation of the Integrated Maintenance Management System (IMMS).

- IMMS was designed to help Maintenance Program supervisors and managers manage all Maintenance resources efficiently and effectively.
- IMMS enables supervisors to record, schedule, and track progress on Maintenance work.
- IMMS provides reports and management information useful in measuring how well the Maintenance Division has managed its resources to address identified needs.
- IMMS supports Caltrans Asset Management programs by providing data about services performed on specifically defined types and locations of assets.
- IMMS tracks expenditures on specialized activities that can be used to bill third parties for damages to State property, and services rendered; or report required data to legally authorized agencies such as law enforcement and environmental organizations.

This manual provides basic IMMS reporting requirements. In addition to the instructions included in this manual, you will need the appropriate IMMS training manual, IMMS Quick Reference Guide, and other reference materials as described in the "Overview" section of this manual. These reference materials are available at the Maintenance Division/IMMS Intranet web site, or can be obtained by contacting your District IMMS Coordinator.

IMMS provides the Maintenance Division the opportunity to capture more detailed and accurate reports on the cost for maintaining Caltrans assets. This manual, used in conjunction with the IMMS training manuals, is intended to provide the Maintenance Supervisor the instructions necessary to achieve accurate reporting.

Another important benefit of IMMS is that all levels of the Maintenance Division can now have access to view the recording of daily work and other information, such as damage reporting and HAZMAT. This is a new advantage that was not available with MMSI. Additionally, everyone that has access to IMMS can generate real time reports. Therefore, Area Superintendents, Region Managers, Deputy District Directors, Maintenance, and Headquarters Maintenance Division staff now have an opportunity to monitor the IMMS to insure work activity is being recorded consistent with their goals, objectives, and reporting requirements.

If you have questions about how to use IMMS, please contact the IMMS Help Desk at (866) QS4-IMMS (774-4667), send a Lotus Notes email to QS4IMMS@dot.ca.gov, or contact your District IMMS Coordinator.

INTRODUCTION

Highway Maintenance is the preservation, upkeep, and restoration of the roadway, facilities, and structures, including toll bridges and appurtenant facilities, as nearly as possible in the condition in which they have been designed, constructed, and improved. Maintenance also includes the operation of highway facilities and services to provide safe and satisfactory highway transportation.

The legal definition of maintenance as contained Section 27 of the Streets and Highway Code includes the following:

- a. “The preservation and keeping of rights of way, and each type of roadway, structure, safety convenience or device, planting, illumination equipment and other facility, in the safe and usable condition to which it has been improved or constructed, but this does not include reconstruction or other improvements.”
- b. “Operation of special safety conveniences and devices, and illumination equipment.”
- c. “The special or emergency maintenance or repair necessitated by accidents or by storms, or other weather conditions, slides, settlements or other unusual or unexpected damage to a roadway, structure, or facility.”

“The degree and type of maintenance for each highway, or portion thereof, shall be determined at the discretion of the authority charged with the maintenance thereof, taking into consideration traffic requirements and monies available therefor.”

The economy of the State of California is closely integrated with highway transportation. The closure of a highway may result not only in inconvenience, but also serious economic loss. To farmers it may mean spoilage of their food products; to manufacturers, the inability to ship their products; to workers, they're being unable to reach their place of employment without undue delay. It is the duty of the maintenance organizations to protect the motoring public from these costly traffic interruptions. The time spent traveling on highways is usually carefully planned and correlated with other activities. Any obstruction or damage to highways that cause delay will necessarily disrupt the day with corresponding economic loss to the user. In addition to prompt response to emergencies, proper scheduling and planning of routine maintenance procedures should be practiced in order that delays will be held to a minimum. Every effort should be made to quickly correct conditions that interfere with orderly flow of traffic.

The Maintenance organization is assigned the care and upkeep of State highways such that the investment in such highways will be preserved and the maximum benefits afforded by constructed facilities will continue to be available to the traveling public.

The Maintenance employee should attempt to perform each operation in the safest and most efficient manner, while maintaining good relations with the public. The employee should understand the contents of this manual and be familiar with similar manuals issued by other offices or branches of the State Department of Transportation.

Because of resource limitations, volume and type of traffic, and other factors, completely uniform standards may be impossible to maintain.

The Maintenance Manual is comprised of two volumes. Volume 1 describes the Maintenance organization and the methods and procedures used in the Maintenance Program.

Volume 2 describes the Integrated Maintenance Management System (IMMS), which is used to record, report, and monitor maintenance work planned and performed.

This manual is issued to secure, to the extent possible, uniformity of practice and procedure in methods developed by past experience. It is the aim of the Department to practice preventive and restorative maintenance, and to maintain existing facilities as nearly as possible to the original condition as constructed or improved.

This manual is not designed to, nor does it establish, a legal standard of care. It is published solely for the information and guidance of the employees of the Department of Transportation. It is subject to modifications as conditions warrant.

It is not intended that any standard of conduct or any duty toward the public shall be created or imposed by the publication of this manual.

**The 2005 Maintenance Manual Volume 2 is dedicated to the memory of Mr. John Coyle,
District 02 IMMS Coordinator.**

4/29/51 - 8/19/05

MANUAL OVERVIEW

The Maintenance Manual Volume 2 is in two parts. Part One includes Chapters 1 through 11. Part Two includes Chapter 12.

In addition to Maintenance Manual Volume 2, Parts One and Two, you may need the following reference materials for instructions about how to navigate in IMMS, and to insure reporting is accurate and complete:

➤ IMMS Training Manual – CREWS

The IMMS CREWS training manual explains:

- Definitions and tips about navigation and short cuts in IMMS.
- How to use the Visual Resource Manager to create Work Orders and cost labor, vehicles and materials.
- How to record Labor Other (Non-Work Order) time.
- How to assign work in advance.
- How to borrow and lend resources.
- How to create, resolve, and link Service Requests.
- How to add Parts and adjust Part levels.
- How to create a Group Project.
- How to set up Scheduled Maintenance cycles.
- How to make pre-interface and post-interface corrections.

In addition to the IMMS CREWS training manual, the following manuals and guides are available:

- Quick Reference Guide - CREWS
- IMMS Training Manual – DISTRICT/REGION
- Quick Reference Guide – DISTRICT/REGION
- IMMS Training Manual – FIELD PLANNING and SCHEDULING
- Damage Reporting Instructions
- HAZMAT Reporting Instructions

The most current versions of these reference materials are located on the Intranet at the Maintenance Division/IMMS web site. These materials will be updated as procedures or policies change. You may obtain a copy of the most current versions by viewing or printing from the web site, or you can contact your District IMMS Coordinator, who will assist you in obtaining a copy.

Note : In order to obtain access rights to IMMS, users must first attend the appropriate IMMS training course for their job. For information about IMMS training, contact your District IMMS Coordinator.

CHAPTER 1

INTRODUCTION TO ASSET MANAGEMENT

This chapter provides an overview of the main systems that comprise the Maintenance Division Asset Management Program, the general purpose and benefits of the IMMS, and how maintenance work is charged against either Assets or the Roadway.

CHAPTER 2

WORK ORDER

This chapter includes general business rules for reporting in IMMS including; reporting employee time, each Work Order tab, Group Projects, and Labor Other (Non-Work Order).

CHAPTER 3

MANAGING MATERIALS AND SUPPLIES

This chapter provides definitions, business rules, and roles and responsibilities for Maintenance Division management of materials and supplies at the cost center level.

CHAPTER 4

MAINTENANCE WORK FREQUENCIES / MAINTENANCE TYPE

Maintenance Work Frequencies and Levels of Service have been historically included in Maintenance Manual Volume 2, and are used to help supervisors and managers in their decision making. These tools for supervisors are still essential, and have been carried forward in this revised manual. Instructions have been redefined to align with **Priority** (When), and **Maintenance Type** (Why), which are now required fields in IMMS.

CHAPTER 5

PLANNING AND SCHEDULING

This chapter provides an overview of the Maintenance Division's strategic planning, how priorities and budget allocations are provided to districts, a description of the Planning module in IMMS, business rules, and district roles and responsibilities for fiscal planning and scheduling.

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CHAPTER 6

OTHER IMMS REPORTING REQUIREMENTS

In addition to reporting of labor, equipment, materials, and other basic information recorded in the Work Order, there are other IMMS forms that must be used when business rules apply. These forms include the ACCIDENT LOG, SERVICE REQUEST, and HAZMAT. This chapter explains the purpose of these forms, when they are required, and general business rules that apply.

CHAPTER 7

REPORTING IN TOPSS

This chapter includes guidelines and helpful information specifically for Maintenance employees that do not report in IMMS.

CHAPTER 8

REPORTS AND MONITORING

This chapter includes an overview of the various types of IMMS reports available, and provides interpretation of most commonly used reports, including the Resource Usage Report.

This chapter also outlines individual monitoring responsibilities, and steps to be undertaken to insure effective management of Maintenance resources.

CHAPTER 9

IMMS ASSET INVENTORY

Chapter 9, IMMS Asset Inventory, is blank at this time. This chapter is being developed, and will be available in the near future for inclusion in this manual.

CHAPTER 10

CODING DEFINITIONS

This chapter includes definitions for the most common types of coding used by the Maintenance Division, and provides supervisors and managers a better understanding of their purpose.

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CHAPTER 11

APPENDIX

The **Appendix** contains miscellaneous information, oftentimes found useful by the reader. It contains information such as:

- Highway Maintenance Program Code and Descriptions.
- County Codes, sorted alphabetically and numerically.
- Grass Mowing Acreage Chart.
- Vehicle Speed / Chemical Application Chart.
- Chemical Proportioning Chart.

- Miscellaneous Conversion Tables :
 - Minutes to Decimal Hours.
 - Miles to Linear Feet and Thousand (M) Linear Feet.
 - Miles to Meter, and Miles to Kilometer.
 - Shrub Spacing per Acre, and per Mile.
 - Sections of Guardrail per Mile.
 - Metric Conversion Factors

CHAPTER 12

See Maintenance Manual Volume 2, “**Part Two**” for Chapter 12.

Chapter 12 includes:

- An explanation of the “Maintenance Activity structure”.
- Tips for using the Maintenance Activity Instructions.
- Activity Instructions grouped by Family.

Supervisors should refer to Maintenance Manual Volume 2, Part Two, to insure they are selecting the appropriate Activity for the maintenance work or administrative business performed, and to help insure required coding is used.

CHAPTER ONE

INTRODUCTION TO ASSET MANAGEMENT

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1.0	INTRODUCTION
1.1	WORK RECORDED TO ASSETS
1.2	WORK RECORDED TO ROADWAY

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1.0 INTRODUCTION

An asset is a uniquely identified item owned and/or maintained by Caltrans. An asset is a physical item in the field that Caltrans maintains, such as a street light pole or a section of roadway, and is associated with a location (county, route, and post mile).

Asset management enables transportation organizations to record and demonstrate how each expenditure contributes to protecting the State's capital investment.

Four main systems comprise the backbone of the **Caltrans Asset Management Program**:

- Integrated Maintenance Management System (IMMS) is a system that helps the Maintenance Division effectively plan, perform, record, and manage maintenance work.
- LOS 2000, the Maintenance Division Level of Service evaluation system, helps determine how well Maintenance Division resources are able to keep up with the demands of deteriorating assets.
- The Pavement Management System provides a systematic, objective evaluation of pavement condition that justifies Maintenance capital budget needs, and helps set project priorities.
- The Bridge Management System inventories the Caltrans bridge assets, tracks inspection results, determines and tracks work completed by Structures Maintenance, and forecasts bridge maintenance, replacement, and/or construction needs.

Asset management uses these four (4) systems to support all aspects of the work cycle: Plan, Do, Check, and Act.

With the implementation of the IMMS, Caltrans took a significant step toward asset-based maintenance management. IMMS, used as an asset management tool, will allow supervisors and managers to:

- Create an inventory of assets.
- Forecast work to be performed on assets.
- Track work performed on assets and associated costs.
- Help supervisors manage materials and equipment.
- Provide access to real time information.
- Track service calls and damage claims.
- Provide decision making tools to supervisors and managers.

IMMS is designed to provide the exact location of each asset, at a point on the road or lineal measurement.

In the summer of 2005, the MMS Highway Physical Inventory will be discontinued. A project will be started to locate and maintain assets in IMMS. If you have any questions about this project, or need inventory reports, please contact your District IMMS Coordinator.

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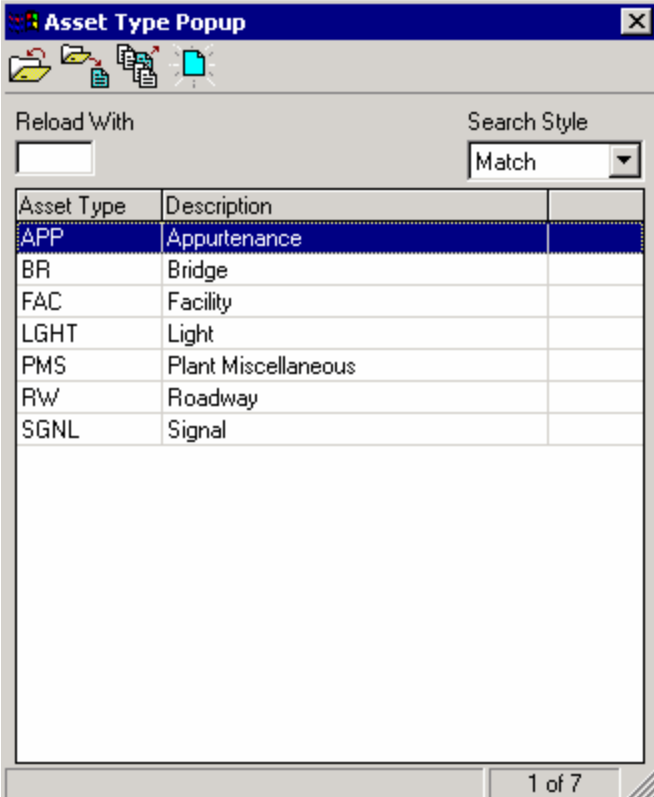
1.1 WORK RECORDED TO ASSETS

All assets maintained by Caltrans will eventually be grouped into asset categories. However, there are a limited number of assets in IMMS at this time.

The following assets **are** in IMMS, and work activity must be charged to the specific asset **Unit ID**:

- Service Facilities (Roadside Rests, Park and Ride Lots)
- Support Facilities (Toll Plazas and Inspection Stations)
- Bridges, Tunnels, Tubes, Ferryboats, Pump Plants, Other Structures
- Maintenance Station Facilities
- Street Lights
- Signals
- Roadway (cannot be charged to an asset or Appurtenance listed above)

On the Work Order, “pop-up” in Asset Type and select the appropriate asset from the options below:



The screenshot shows a window titled "Asset Type Popup" with a close button (X) in the top right corner. Below the title bar is a toolbar with icons for file operations. The window contains a "Reload With" text box and a "Search Style" dropdown menu set to "Match". Below these is a table with two columns: "Asset Type" and "Description". The table lists the following items:

Asset Type	Description
APP	Appurtenance
BR	Bridge
FAC	Facility
LGHT	Light
PMS	Plant Miscellaneous
RW	Roadway
SGNL	Signal

At the bottom of the window, there is a status bar showing "1 of 7".

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Next, select the asset. Facilities ID begins with the district number, followed by the name. Enter the district number and “pop-up” in the UNIT ID field to narrow your search.

Hansen Information Technologies - Version 7.6 (Sandbox)

File Accident Asset Work Order PM Customer Part Window Help

Work Order # [] Roadway []

Asset [FAC] Unit ID [03] [12TH AVENUE]

Address []

Facility Popup

Initial Reload With [] Sort By [Facility ID]

Sch Facility ID [] Search Style [Match]

Due Description []

Initial Qualifier []

Proj Address []

Bud []

Facility ID	Description	Address
0312THAVENUE	12TH AVENUE	
0312THSTREET	12TH STREET	
032NDST	2ND ST	
033RDSTREET	3RD STREET	
0347THAVENUE	47TH AVENUE	

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Once the Unit ID field is selected, you can “pop-up” in the Activity field to see the list of Activities that are available to use with that asset. It is extremely important to always review the Activity Instructions included in this manual to insure that you are using an Activity that applies to the work you are performing, and to insure that you follow any special reporting requirements that may apply.

Hansen Information Technologies - Version 7.6 (Sandbox)

File Accident Asset Work Order PM Customer Part Window Help

Work Order # [] Roadway []

Asset [FAC] Unit ID [0312THAVENUE] [12TH AVENUE]

Address [] W/O Type []

Activity []

Initiated [] Scheduled [] Due [] Initiated By [] Project [] Budget # []

Started [] Completed [] Comp By [] Hours [] Down Time []

Work Order [Com]

Activity Definition Popup

Reload With [] Sort By [Activity]

Activity [] Search Style [Start]

Description []

Activity	Description
C30011	TREE TRIMMING ROADSIDE
D30000	SWEEPING ROADWAY
D60000	GRAFFITI REMOVAL ALL ASSETS
F10004	GENERAL MEETINGS (MGMT/SUPPF)
F20001	INSPECTION DRAIN INLET
F20005	DRAIN STENCILING
F30010	REPAIR/REPL CORRECTIVE MEASUI
F40210	SNOW HAULING (STORMWATER)
F50005	VEG MGMT & CHEM USAGE PLANS
F50006	NPDES PERMIT RELATED ACTIVITY
F50007	FIELD ACTIVITY BMP MEASURES
F60002	INVESTIGATION IC/ID (&REPORTS)
F60030	OVERSIGHT REMOVE CONNECTION

Ready

1.2 WORK RECORDED TO THE “ROADWAY”

Work performed on assets that are not in IMMS is charged to the ROADWAY, and the appropriate post miles for the work location. Examples of work activity charged to the ROADWAY include roadbed, vegetation and slopes, drainage, railings and barriers, signs and sign structures, delineation, walls and fences, and landscape.

Also charged to the ROADWAY are work activities that are planned or responsive and related to keeping the travelway safe and clean. These activities include sweeping, graffiti removal, snow removal and ice control, and both minor and major damage related to storms or extraordinary events such as earthquakes, slides, tidal waves, etc.

When ROADWAY (RW) is selected, fields appear for entering post mile and prefix information.

When charging the work activity to the ROADWAY, a Work Order should be associated with “a job”, and the post mile limits should be reflective of the actual work area. When determining post mile range for a Work Order, as a good business practice, supervisors and managers should keep in mind that accuracy of reports is dependent on how specific the work is recorded by the supervisor. Post miles, and comments, can be very important when detail is required for third party damage to State property, legal and environmental issues, Major Maintenance, storm damage, budgetary requirements, or other needs.

Note: Some “K” Family Inspection Activities are charged against the Roadway.

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Postmiles and Prefixes must be entered exactly as reflected in the Roadway Feature Viewer Distance Markers. See example below:

Work Order

Work Order # [] Roadway []

Asset [RW] [04-ALA-112] From [0.000] [RPM] To [1.200] [PM]

Element [] XSP [] WO Type []

Activity []

Roadway Feature Viewer

Roadway ID [04-ALA-112] View Date [07/22/2003] Length [1.782] [MI]

Description [DISTRICT 04, ALA COUNTY, ROUTE 112]

Reference Point [] Expired []

	0	1
CITY		SLN
COUNTY		ALA
DISTRICT		04
EAST SURF	AC	PCC [AC][A][P] AC
FUN CLASS		3
DISTMARK	RPM 0.000 - 0.471	PM 0.471 - 1.782
ROUTE #		112
TERRAIN		FLAT
WEST SURF	AC	PCC [AC][A][P] AC

Buttons: Insert, View, Remove, Set Ref. Pt., Set Range, Open

Attributes Assets Lanes Markings Elements Comments Maint Filter Off

Supervisors can obtain a list of routes and post miles for their area from their District IMMS Coordinator. Or, a quick way to access the Roadway Feature Viewer is once Roadway ID has been entered, left click in Unit ID field, then click "Open Form" button.

Note: Always open Roadway Feature Viewer before entering post miles and prefixes in the Work Order.

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CHAPTER TWO

WORK ORDER

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2.10	LABOR OTHER (NON-WORK ORDER)
2.11	GROUP PROJECTS

2.0 WORK ORDER – Roles and Responsibilities

MAINTENANCE SUPERVISOR

- As applicable, insure that the proper coding requirements are recorded on the Work Order for the job, for example: Maintenance Activity, Expenditure Authorization, Project Number, Special Designation, Subjob, TRAMS Activity Code, Problem Code, Maintenance Type, and Priority Code.
- Provide necessary details for the job in Work Orders, including post mile perimeters that reflect the work area (or appropriate asset), any comments that will be necessary for future reference, accurate daily production unit, support activities, and material usage information.
- Close Work Orders when job is complete, not to exceed 30 days unless the Work Order meets exception criteria.
- Follow business rules regarding costing employees and submittal of time to region by imposed daily deadline.

MAINTENANCE AREA SUPERINTENDENT

- Insure that supervisors are providing necessary details for the job, including selecting post mile perimeters that reflect the work area and comments detailed in the Comments tab.
- Review open Work Orders and insure that Work Orders are closed as appropriate.
- Verify that supervisors are using proper coding, including Special Designations, Project Numbers, Expenditure Authorizations, and TRAMS Activity Codes.
- Monitor material usage and production units to insure accurate reporting.
- Insure that supervisors are reporting clock hours correctly.
- Enforce Caltrans and IMMS business rules related to costing and submittal of time.
- Review Work Orders in supervisor's Visual Resource Manager to gain an understanding of what work is being performed and overall reporting practices.

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REGIONAL ADMINISTRATIVE OFFICE (RAO)

The following are daily or “as needed” activities performed by the region office. Detailed instructions on how to perform these tasks can be obtained by referring to the most current IMMS Region Training Manual, available at the Maintenance Division/IMMS Intranet web site, or by contacting your District IMMS Coordinator.

- Verify information on new employees as sent from TOPSS via the interface.
- Update a supervisor’s Crew Definition.
- Update a supervisor’s Visual Resource Manager.
- Run daily time report for the current day and resolve any problems.
- Run the Time Comparison Report for the current day, and resolve any problems.
- Run the IMMS Time Sheet Daily Pay/Leave Summary Report.
- Run the IMMS/TOPSS Correction Report.

MAINTENANCE REGION MANAGER

Region Managers should periodically view the recording of daily work and other information recorded in IMMS (Work Orders, Service Requests, Accident Logs, and HAZMAT), particularly when there is an indication that instructions are not being followed, or reports do not reflect the objectives of fiscal goals, IMMS requirements, or Departmental policies. Managers can also monitor by viewing real time reporting in IMMS. Feedback on their findings should be communicated to Maintenance Area Superintendents to resolve.

DEPUTY DISTRICT DIRECTOR, MAINTENANCE

The Deputy District Director, Maintenance is responsible for setting and conveying to Maintenance Region Managers and District Maintenance Support staff high level expectations for recording of work activity in IMMS. These expectations may be based on statewide guidelines or policy, or specific requirements within their district.

As well as a guide for the Maintenance Supervisor, this manual is intended as a guide for management to determine appropriate charging practices.

2.1 WORK ORDER – General Business Rules

The IMMS Work Order is used to create a permanent record of work done on a roadway or on particular assets related to the roadway. The IMMS Work Order captures all field employees' time spent on productive and non-productive activities. It also captures costs for all vehicles and material used to complete maintenance activities.

Information recorded on a Work Order is normally the work performed by crew members assigned to the cost center performing the work within the geographical limits of the cost center. The objective of the Work Order is to record the expenditures of labor, production units, vehicles, and materials in such a way that they can be related to the planned and budgeted workload.

Sections 2.3 through 2.9 of this chapter provide the business rules for each Work Order tab and field, beginning to end, in the order you tab through the system. The minimum fields that must be completed for all Work Orders are indicated by **REQUIRED** next to the field heading. Fields that must be completed in certain circumstances are indicated by **REQUIRED if applicable** next to the field or tab heading. These guidelines may be exceeded by district or region policy, or circumstances that require capturing additional information.

Following are some of the general business rules that apply to the Work Order process:

- Work Order numbers are automatically generated by IMMS.
- All work that takes more than 30 minutes to complete must be recorded on a Work Order.
- A Work Order should stay open only as long as the job is active. When the job is finished, the Work Order should be completed. For example, a Work Order for a crack seal job on a single length of roadway that lasts several days can stay open until the work is completed. Work Orders should be associated with a job, and must not be assigned with an “all inclusive” post mile range, or left open beyond the date of completion of the specific work operation. Work Orders should be closed at the end of the fiscal year unless exception criteria have been met.
- Costs must be added each day work is performed and recorded on the Work Order.
- Work Orders must be costed before each district or region deadline.
- After the 1 a.m. interface with other systems, supervisors will be required to make post-interface error corrections.

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- A Work Order involving chemical applications cannot be costed for more than one day. Once costed, Work Orders must be completed. Supervisors shall print the Daily Chemical Use Report, verify the chemical use information, sign the Daily Chemical Use Report, and forward it to the Area Superintendent.
- Area Superintendents shall verify the chemical information, especially the quantity of chemicals used, sign the Chemical use Report, and forward it to the District Landscape Specialist for their records.
- If multiple supervisors and crews are working together on a job, each supervisor will create and record work information in his/her own Work Orders. The Service Request number will link multiple Work Orders for a job, if necessary (for example, damage reporting). As a business practice, supervisors may record labor hours for an employee from another crew on their Work Order if the crew member has been borrowed for the job.

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2.2 WORK ORDER – Reporting Employee Time

INTRODUCTION

The Integrated Maintenance Management System (IMMS) accounts in detail for the hours of each assigned or borrowed employee of a cost center. It accounts for the number of hours present for work in a twenty-four hour day as well as the hours absent from their assigned shift. The time reported in IMMS is the basis for payment of wages and additional payments such as overtime.

An entry is made, either worked or absent, for each employee assigned to the cost center for each day that the employee is scheduled to work. Work performed on scheduled days off and work performed by borrowed employees is also reported. All regularly assigned crew members should be added to the Maintenance Supervisor crew members roster in the Visual Resource Manager (VRM) and Crew Definition set up. The adding of crew members to VRM and performing Crew Definition set up is the responsibility of the region office.

Maintenance Supervisors, Area Superintendents, and managers are expected to be familiar with Bargaining Unit contracts that apply to their employees.

DAILY TIME SUBMITTAL - IMMS

Employee time will be charged daily by the Maintenance Supervisor based upon the employee's work shift. This will be completed by the crew supervisor or his/her designee for the previous work day and transmitted to the region office for processing per the region policy.

In the event that the Maintenance Supervisor or Maintenance Leadworker is not available, a "trusted supervisor" or the Area Superintendent shall enter Work Order information and process.

PAY TYPE

The appropriate Pay Type must be used for each employee. Also, the Pay Type must align with the employee's work SHIFT. The Pay Type used must reflect the shift designated on the Employee Form. Normally, when an employee's work hours cross over from Day to Evening, Evening to Night, etc., choose the Pay Code which the employee spends the majority of work time. For example, if employee worked from 10 p.m. to 06:30 A.M., regular work hours, the Pay Code should be REGULAR PAY NIGHT SHIFT (RN). Supervisors should be familiar with their region policy and employee bargaining unit guidelines in regard to reporting work shifts.

Day : 6 A.M. TO 6 P.M.

Evening : 6 P.M. TO MIDNITE

Night : MIDNITE to 6 A.M.

See list of Pay Types on following pages.

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Pay Type	Description
AP	AVALANCHE CONTROL PAY
CDC	CTO DAY SHIFT CALLBACK
CDE	CTO DAY SHIFT EMERGENCY
CDP	CTO DAY SHIFT PLANNED
CEC	CTO EVENING SHIFT CALLBACK
CEE	CTO EVENING SHIFT EMERGENCY
CEP	CTO EVENING SHIFT PLANNED
CNC	CTO NIGHT SHIFT CALLBACK
CNE	CTO NIGHT SHIFT EMERGENCY
CNP	CTO NIGHT SHIFT PLANNED
DP	DIVING PAY
ODC	CASH OT DAY SHIFT CALLBACK
ODE	CASH OT DAY SHIFT EMERGENCY
ODP	CASH OT DAY SHIFT PLANNED
OEC	CASH OT EVENING SHIFT CALLBACK
OEE	CASH OT EVENING SHFT EMERGENCY
OEP	CASH OT EVENING SHIFT PLANNED
ONC	CASH OT NIGHT SHIFT CALLBACK
ONE	CASH OT NIGHT SHIFT EMERGENCY
ONP	CASH OT NIGHT SHIFT PLANNED
RD	REGULAR PAY DAY SHIFT
RDC	REGULAR PAY DAY SHIFT CALLBACK
RDSP	REGULAR DAY SPECIAL PAY
RE	REGULAR PAY EVENING SHIFT
REC	REGULAR PAY EVENING CALLBACK
RN	REGULAR PAY NIGHT SHIFT
RNC	REGULAR PAY NIGHT CALLBACK
SB	STANDBY UNIT 15 ONLY
SDB	STANDBY UNIT 15 ONLY
SP	SPECIAL ASSIGNMENT PAY

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PERMANENT INTERMITTENT EMPLOYEES

ID numbers assigned to Permanent Intermittent (P.I.) employees must begin with letter “T”. On the Employee Form, the region office must check box “YES” indicating the employee is a P.I.

RECORDING MAINTENANCE SUPERVISOR’S TIME

All time the supervisor spends with his/her crew will be distributed over the Work Order(s) for the day. The same applies for his/her vehicle hours. Other time, such as training or safety meetings, under certain circumstances can be recorded in the employee Time Breakdown as a separate Labor Type. See Chapter 2, Section 2.10, for guidelines regarding the use of “Labor Other” (Non-Work Order). Labor Other options should only be used per guidelines.

When including a supervisor’s time on a Work Order associated with damage reporting, other forms of reimbursement, or charging to an Expenditure Authorization other than Maintenance, care should be taken to insure only the actual time spent on that particular job is reported.

The Caltrans Maintenance Supervisor is delegated authority and responsibility for supervision of field operations. The authority may be delegated to a Maintenance Leadworker only in the absence of the Maintenance Supervisor. Other Caltrans Maintenance personnel may be placed in charge of an operation, but are not considered supervisory.

CLOCK HOURS

As stated previously, the Pay Type must align with the employee’s work SHIFT. Supervisors must enter accurate start times for employees, and insure that end times, whether all time is charged to one Work Order or to multiple Work Orders, reflects time allowed for lunch period.

EMPLOYEE LEAVE TIME

Supervisors are required to include comments in IMMS stating reason for absence when an employee is absent due to Sick Leave, Family Sick Leave, or Bereavement. For Family Sick Leave and Bereavement Leave, relationship must be stated in the comments. Supervisors should check with their region office to insure any additional procedures or documentation requirements are met in regards to use of Sick Leave, Family Sick Leave, and Bereavement Leave.

Vacation, Sick Leave, Annual Leave, and Personal Leave may be reported in 0.5 hour increments. CTO taken, Jury Duty, and time off payroll may be reported in tenths (0.1) of hours. Excess hours used as leave may only be reported in full hours.

Personal Holidays and calendar days of Military Leave are reported as 8 hours each.

AWOL indicates absent without leave (absence not approved). AWOP indicates absent without pay (absence approved). Supervisors should contact their region office for procedures for reporting time when employee is absent without pay, whether approved or unapproved.

Maintenance Supervisors, Area Superintendents, and managers are expected to be familiar with bargaining unit contracts that apply to their employees.

REPORTING OF BORROW AND LOAN IN IMMS WITHIN THE SAME DISTRICT

This Borrow and Loan procedure applies only when both cost centers report time in IMMS.

It is recommended that supervisors have a mutual trusted relationship in order to view each other's resources. A trusted supervisor can view and make changes to work and resource information in another supervisor's Visual Resource Manager (VRM).

In IMMS, the lending supervisor lends the resources and revokes the loans. A lending supervisor may loan crew members and vehicles to another supervisor.

It is the borrowing supervisor's responsibility to cost the borrowed employee's time. A borrowing supervisor borrows crew members and vehicles from another supervisor. The lending supervisor carries any leave time taken by the employee on loan.

A supervisor first calls the other supervisor to ask to borrow resources. The lending supervisor agrees to loan the resources, and lends them to the borrowing supervisor in IMMS.

The lending supervisor verifies the hours worked for his loaned crew members.

REPORTING EMPLOYEE EXPENDITURES IN IMMS WHEN LOANED TO ANOTHER DISTRICT

Normally, when crew members from another district are loaned, the borrowing supervisor will complete a separate Work Order for the borrowed crew members. The **Crew** recorded on the Work Order tab should be the borrowed crew. The borrowing supervisor's ID should be recorded in the **Assigned to** field. The **Charge District** on the Additional tab should be the borrowing district number. Leave time for borrowed employees must be carried by the lending supervisor.

CALLBACK AND/OR CALLOUT FOR CASH OR CTO

Callbacks and callouts shall be charged to a specific Activity with necessary details associated with the incident. A Work Order shall be created specifically for the callback/callout and not combined with other crew operations and Work Orders.

TIME COMPARISON

Maintenance Supervisors should review the Time Bank and Time Comparison Report daily to insure employees are charged correctly. After entering the time worked for all employees, a Time Comparison report should be run by the region office to insure that all employees are accounted for.

Sections 2.3 through 2.9 of this chapter provide the business rules for each tab and field, beginning to end, in the order you tab through the system. The minimum fields that must be completed for all Work Orders are indicated by **REQUIRED** next to the field heading. Fields that must be completed in certain circumstances are indicated by **REQUIRED if applicable** next to the field or tab heading. These guidelines may be exceeded by district or region policy, or circumstances that require capturing additional information.

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2.3 WORK ORDER – Top Portion - ROADWAY

- **01 Work Order #** System generated
System generated. Note: Clear existing Work Order number before creating a new Work Order.
- **02 Asset** REQUIRED
Roadway (RW)
- **03 Roadway ID Field** REQUIRED
The district, county, and route where work is being performed. Note: Once the Route ID is selected, next step should be to use “Open Form” button to open Roadway Feature Viewer.
- **04 Beginning Post mile** REQUIRED
Beginning post mile of work area.

A Work Order should be associated with “a job”, and the post mile limits should be reflective of the actual work area. When determining post mile range for a Work Order, as a good business practice, supervisors and managers should keep in mind that accuracy of reports is dependent on how accurate the work is recorded by the supervisor. This can be very important when certain detail is required for third party damage to State property, legal and environmental issues, Major Maintenance, storm damage, and budgetary requirements.

Post miles and Types (prefixes) must be entered exactly as reflected in the Roadway Feature Viewer.

- **05 Beginning Type (Prefix)** REQUIRED
Post mile Prefix.

Always entered in conjunction with Roadway Feature Viewer Distance Markers.

- **06 Ending Post Mile** REQUIRED
Ending post mile of work area.
- **07 Ending Type (Prefix)** REQUIRED
Ending Prefix

Top Portion - ROADWAY (Continued)

The screenshot shows the 'Work Order' window with the following fields and callouts:

- Work Order #**: [Empty field]
- Roadway**: [Empty field]
- Asset**: [RW] (Callout 9)
- From**: [0.000] [MI]
- To**: [0.000] [MI]
- Element**: [8] (Callout 8)
- XSP**: [10] (Callout 10)
- WD Type**: [Empty field]
- Activity**: [11] (Callout 11)
- Activity**: [12] (Callout 12)

- **08 Element, Lane, Marking**
Truck Escape Ramps use Elements.
- **09 Roadway Element, Roadway Lane, Roadway Marking**
Truck Escape Ramps are Elements on those routes having Escape Ramps.
- **10 Cross Sectional Position** [NOT USED]
- **11 Activity** REQUIRED
The Maintenance Activity defines the type of maintenance work being performed.

Enter letter and first number of Maintenance Family Activity (example: “A” or “A1”) and “pop up” to narrow search.

See Chapter 12, “Activity Instructions” to select appropriate Activity for the work performed. Special reporting requirements may apply, such as Special Designation, Project Number, Expenditure Authorization (EA), or TRAMS Activity Code.

The Activity and other core fields must be put in before costing. Once costed and interfaced, making changes to these core fields require correcting the entire Work Order. See Chapter 10, “Coding Definitions” for a complete list of IMMS core fields.

- **12 Work Order Type** [READ ONLY]

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Top Portion - ROADWAY (Continued)

Selecting post miles using the Roadway Feature Viewer

Post miles and Types (prefixes) must be entered exactly as reflected in the Roadway Feature Viewer (see example below).

Always review Roadway Feature Viewer before entering post miles and prefixes. A quick way to access the Roadway Feature Viewer is once Roadway ID has been entered, left click in the Roadway ID Field, then click "Open Form" button.

Work Order

Work Order # Roadway

Asset From To

Element XSP W/O Type

Activity

Roadway Feature Viewer

Roadway ID View Date Length

Description

Reference Point Expired

	0	1
CITY	SLN	
COUNTY	ALA	
DISTRICT	04	
EAST SURF	AC	PCC AC A P
FUN CLASS	3	
DISTMARK	RPM 0.000 - 0.471	PM 0.471 - 1.782
ROUTE #	112	
TERRAIN	FLAT	
WEST SURF	AC	PCC AC A P

Attributes Assets Lanes Markings Elements Comments Maint Filter Off

Buttons: Insert, View, Remove, Set Ref. Pt., Set Range, Open

Supervisors can obtain a list of all routes with post mile segments and corresponding post mile types for their area from their District IMMS Coordinator.

Note: For work performed which is not State highway, use Route 900, post miles 0.0 to 0.0. Each district has this option.

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2.3 Work Order - Top Portion

APPURTENANCE; FACILITY; ELECTRICAL; BRIDGE

The screenshot shows a 'Work Order' window with the following fields and their corresponding labels in the image:

- 01** Work Order #
- 02** Asset
- 03** Unit ID
- 04** Address
- 05** Activity
- W/O Type

➤ **01 Work Order #** **System generated**

System generated.

Note: Clear the existing Work Order number before creating a new Work Order.

➤ **02 Asset** **REQUIRED**

Select the appropriate asset group.

➤ **03 Unit ID** **REQUIRED**

BRIDGE: **Bridges, Tunnels, Tubes, Other Structures, Pump Plants, Ferryboats**
ID number, preceded by county number. Enter county number and “pop up”.
See Appendix for list of county codes.

FACILITY: **Maintenance Stations and other Maintenance facilities**
Facility name preceded by district number. Enter district number and
“pop up” to narrow search.

APPURT : **Park and Rides, Safety Roadside Rests, Inspection and Weigh Stations, Toll
Plazas**
Appurtenance name. Example: “Alameda Del Prado”

SIGNAL: **Traffic Signals**
Signal ID number preceded by district, county, and route.
Signal assets include: Traffic Signal, Ramp Meter, Count Station, TOS Equipment.

LIGHT : **Highway Light, Highway Illuminating signs, Traffic Signal O/H Safety Lighting**
Light ID number preceded by district, county, and route.

PLANT MISC [NOT USED]

➤ **04 Address (Non-RW)** [READ ONLY] [NOT USED]

➤ **05 Activity** **REQUIRED**

The Maintenance Activity defines the type of maintenance work being performed.

Enter letter and first number (example: “A” or “A1”) and “pop up” to narrow search.

See Chapter 12, “Activity Instructions” to select appropriate Activity for the work performed.
Special Reporting Requirements may apply, such as Special Designation, Project Number,
Expenditure Authorization (EA), or TRAMS Activity Code.

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2.4 WORK ORDER TAB

- **01 Initiated** **REQUIRED**
Date work started – leave time blank – or – enter the time the work began.

Note: This field will auto-populate with day and time Work Order was created. **This must be changed to reflect the proper date. Delete the time and leave time blank.**
- **02 Scheduled** [NOT USED unless Group Scheduled Maintenance]
- **03 Due** [READ ONLY]
- **04 Initiated By**
ID of the person who initiated the Work Order.
- **05 Project** **Required – if applicable**
When business requires, a Project Number is used to track costs for a specific project or problem in IMMS.
 - PROBLEM Code is also required any time a Project Number is used.
 - Select appropriate existing Project Number in the system, or contact your District IMMS Coordinator to request a new Project Number.
 - If there is a need to generate reports through TRAMS, or if staff does not report in IMMS, a Special Designation number should be used in addition to, or in place of, a Project Number.
- **06 Budget #** [NOT USED]
- **07 Source** [NOT USED]
- **08 Maintenance Type** **REQUIRED**
A Maintenance Type is used in an effort to better define Caltrans reasons for work performed, and to assist Headquarters Maintenance Division when determining budget projections and needs in the future.

See Chapter 4, “Maintenance Levels of Service and Maintenance Types” for the suggested Maintenance Type Code to use for your work activity.

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Initiated	<input type="text"/>	Source	<input type="text"/>	Authorization	<input type="text"/>
Scheduled	<input type="text"/>	Maint Type	<input type="text"/>	Assigned To	<input type="text"/>
Due	<input type="text"/>	Problem	9	Crew	<input type="text"/>
Initiated By	<input type="text"/>	Priority	<input type="text"/>		
Project	<input type="text"/>	Service #	<input type="text"/>	<input type="checkbox"/> Out of Service	
Budget #	<input type="text"/>			<input type="checkbox"/> Potential Service Request	
Started	<input type="text"/>	Result	<input type="text"/>		
Completed	<input type="text"/>	Condition	<input type="text"/>		
Comp By	<input type="text"/>	Quantity	<input type="text"/>		
Hours	<input type="text"/>	Data Group	<input type="text"/>		
Down Time	<input type="text"/>	<input type="checkbox"/> Major Failure			

Work Order / Comments / Activities / Failures / Costs / Standard / Spot / Issp / Log / Applications / Schedule

➤ **09 Problem** Required – if applicable

ACDNT

The ACDNT Code is required when there is damage to State property and **the third party is KNOWN**. A Service Request and Accident Log are required when ACDNT is used. Damage reporting is a required process, and all Maintenance Division employees who perform damage reporting related activities must be diligent in making certain that the process is followed correctly and in a timely manner.

See Chapter 6, “Other IMMS Reporting Requirements” for instructions regarding the Accident Log and Service Request process.

ACUNK

The ACUNK Code is required when there is damage to State property and the third party is **UNKNOWN**. It is very important to add the ACUNK Code from the PROBLEM field on the Work Order if the responsible party is not known. This allows the Maintenance Division to track how much is spent on unbillable damage to State assets.

Note: In the event a third party is identified at a later date, you can remove the ACUNK Code from the PROBLEM field and replace it with ACDNT. In addition, you can create an Accident Log and add billing information after the fact.

DAMAGE

The DAMAGE Code must be used any time a Project Number is used to track major /storm damage locations. See the “S” Family Activity Instructions for specific instructions for major damage reporting.

PROJECT

The PROJECT Code is used in conjunction with district or statewide specific Project Numbers that are NOT storm damage related.

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➤ **10 Priority** REQUIRED

Maintenance Priority Codes are used in an effort to assist the supervisor with prioritizing and scheduling work. Recording this information allows the Maintenance Division to track Responsive and Non-Responsive Maintenance. A Priority Code must be entered for all Work Orders whether they are for maintenance work or administrative activities.

See Chapter 4, “Maintenance Levels of Service and Maintenance Types” for instructions for Priority Code, including definitions for each of the Priority Code “pop up” options.

➤ **11 Service #** Required – if applicable

Service Requests are required:

- For all known third party damage on State right of way.
- For spills, hazardous AND non-hazardous, and whether the substance is identified or not.

If a Service Request is generated, the Service Request Number must be on all Work Orders associated with the incident, including when multiple crews are involved.

See Chapter 6, “Other IMMS Reporting Requirements” for instructions regarding Service Requests.

➤ **12 Authorization** [NOT USED]

➤ **13 Assigned to** Required – if applicable

This field will auto-populate with the person who is logged in to the system.

When a leadworker is entering a Work Order, the leadworker must enter the Supervisor ID in order for the Work Order to be assigned to the supervisor’s Visual Resource Manager.

Note: If an “Acting” Supervisor ID is being used (Example Dxxx), that ID must be entered.

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- **14 Crew** REQUIRED
District/Cost Center
- **15 Out of Service** [NOT USED]
- **16 Potential Service Request** [NOT USED]
- **17 Started**[NOT USED]
- **18 Completed** REQUIRED
Date and time Work Order is completed (**Closed**).

It is important that the Work Order is completed (Closed) when the job is done. The maximum amount of time Work Orders should remain open is 30 days, and should be closed June 30th (end fiscal year) unless there is a valid reason to keep them open. For example:

- Work Orders linked to an Accident Log with pending charges or work to be performed.
- Work Orders for special maintenance projects (such as Major Maintenance).
- Work Orders for an effort that is of a specific duration.
- Work Orders for Unit and Group Scheduled Maintenance.
- **19 Completed By** Required if applicable
The ID of the person completing the Work Order.

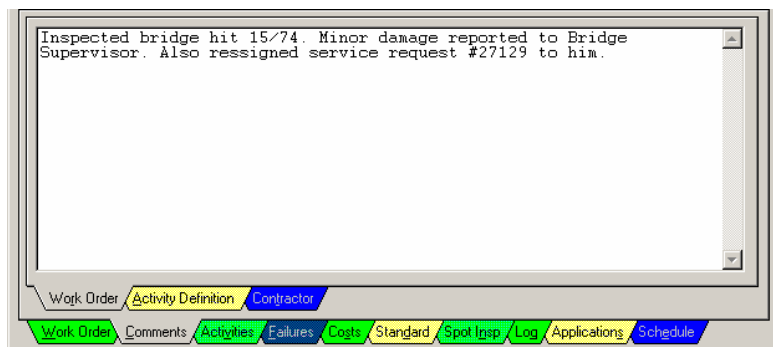
This field shall be completed in cases where the person completing the Work Order is different than the “Assigned to” ID. As an example, if a leadworker completes the Work Order and the “Assigned to” field is the Supervisor ID.
- **20 Hours** (NOT USED)
- **21 Down Time** [NOT USED]
- **22 Result** [NOT USED]
- **23 Condition** [NOT USED]
- **24 Quantity**
Production units total. Cumulative total of production units entered on the Additional tab.

Production units must be entered on the Additional tab, which will populate this field with a cumulative total. See Activity Instructions for the Activity you are using for production unit and tips on production unit calculation.
- **25 Data Group** [NOT USED]
- **26 Major Failure** [NOT USED]

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2.5 WORK ORDER - Comments Tab

REQUIRED if applicable

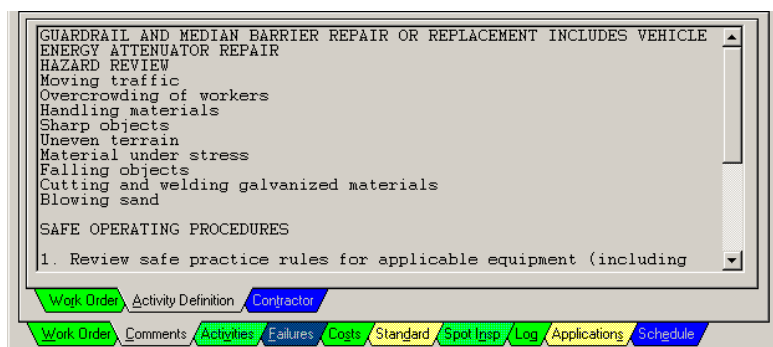


➤ 01 Work Order Tab

These Comments are only comments that are “printable”.

Comments are very important for future reference regarding details about the work performed or any unusual circumstances. Comments should be added to Work Order daily. Certain Activities require comments, as an example, M41010.

Note: An added benefit is that these comments can aid in referencing Work Orders in the Visual Resource Manager.



➤ 02 Activity Definition Tab [READ ONLY]

CODE OF SAFE PRACTICES (If tied to Activity)



➤ 03 Contractor Tab

Comments can be very important for future reference regarding details about the work performed or any unusual circumstances.

2.6 Work Order - COSTS TAB

2.06.1 WORK ORDER – Costs Tab – CONTRACTOR Required – if applicable

The Contractor tab allows you to record hours worked by the contractors that are listed in the pop-up. The options included are either Special Programs People (SPP) or other State agencies. These are contracted services, and actual expenditure information can be obtained from TRAMS, or by contacting your Contract Manager. The hours and other information recorded on the Contractor tab do not go to TRAMS or any other system.

An hourly “rate” can be applied to a contractor. The rate is multiplied by the number of hours, and the cumulative total dollars expended will be reflected in WO Total field on the Contractor tab. The request to create a rate should be directed to the District IMMS Coordinator. If a rate is established, users are cautioned that rates can change, and therefore expenditures reflected in the Contractor tab should be considered estimates. Actual expenditure information can be obtained from the Contract Manager.

If an hourly rate has not been established for a contractor, a fractional dollar amount will appear in the Work Order Total field. This figure should be ignored. The system is required to have a dollar amount in that field. Therefore, if no rate has been established, the system default is to apply this fractional amount.

The Contractor tab is not intended to capture information for contracts other than those listed. The encumbrance/expenditure information for other contracts and services should be obtained from the appropriate source in your district.

SPECIAL PROGRAMS PEOPLE REPORTING

Only Caltrans labor, vehicles, and materials DIRECTLY IN SUPPORT OF SPP should be added to a Work Order when the Contractor tab is used to record SPP hours.

Activities such as bag pick up by Caltrans employees can be charged to the Work Order used to record SPP hours and Caltrans support.

When Caltrans crews are doing production work along side contractors, a separate Work Order should be used to capture these costs. This process is very important. The SPP reports build a ratio of Caltrans support to contractor work. Not separating Caltrans work not directly in support of the SPP inflates the Caltrans support ratio and contractor production units in these reports.

Costs Tab – CONTRACTOR (Continued)

SUPERVISION OF SPECIAL PROGRAMS PEOPLE

When working SPP, a Caltrans employee at Caltrans Maintenance Leadworker level or above will be in geographical area. When a Caltrans Maintenance Leadworker or above is **not** at the worksite, a Caltrans Maintenance Worker or above will be at the worksite to give technical direction. If SPP have their own guard or supervisor, a Caltrans employee does not have to be at the worksite. However, a Caltrans Maintenance Supervisor or employee should meet with the SPP guard or supervisor daily to collect hours and give technical advice and safety instructions.

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Costs Tab – CONTRACTOR (Continued)

The screenshot shows a software window titled "Contracted Service Cost". It contains several input fields and radio buttons. Eight numbered circles are placed over specific fields: 1 is over the "Contracted Service" radio button, 2 is over the "Contractor" radio button, 3 is over the "Activity" text field, 4 is over the "Task" text field, 5 is over the first part of the "Charge" time field (showing "0:00"), 6 is over the second part of the "Charge" time field (showing a slash and empty space), 7 is over the "Contractor ID" text field, and 8 is over the "Budget #" text field. Other fields include "Usage" (showing "0.00") and a large "Comments" text area at the bottom.

- **01 Contracted Service** [NOT USED]
- **02 Contractor**
Always select this option for recording the contractor information.
- **03 Activity**
Auto-populates with Activity that has been entered on Work Order.
- **04 Task** [NOT USED]
- **05 Charge**
Auto-populates with the work date and time entered on Work Order tab.
- **06 to (time)** [NOT USED]
- **Contractor ID**
“Pop-up” in this field to view the Contractor Codes.
Select the appropriate code for the contractor you are using.
- **08 Budget #** [NOT USED]

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Costs Tab – CONTRACTOR (Continued)

The screenshot shows a software window titled "Contracted Service Cost". It has two tabs: "Contracted Service" and "Contractor", with the "Contractor" tab selected. The form contains several input fields: "Activity" (a long text box), "Task" (a text box), "Charge" (a date/time range selector showing "0:00" to "0:00"), "Contractor ID" (a text box), "Budget #" (a text box), and "Usage" (a numeric field with a decimal point, showing "90.00"). A circled "9" is next to the "Usage" field. Below these fields is a large "Comments" text area, which contains a circled "10".

➤ **09 Usage**

Enter the number of total hours worked by the contractor for that day.

Example: 2 workers each worked 8 hours = 16 hours total.

➤ **10 Comments**

If a dollar amount rate has been established for a contractor, use the "Contractor Comments" to explain how the rate is arrived at. Example: by the hour, by the day, etc.

Comments can be very important for future reference regarding details about the work performed, or any unusual circumstances. Comments regarding the contractor can be entered here, or in the Work Order Comments tab. Keep in mind that these comments are not printable. The "Work Order Comments" are printable.

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2.06.2 WORK ORDER – Costs Tab – EXTRA ITEM Required – if applicable

The Extra Item tab is used to capture certain costs that cannot be recorded any other place in the Work Order.

The Extra Item tab is required when the work is, or could possibly be, reimbursable, or if all costs associated with the specific job must be tracked for budget purposes.

Examples of when the Extra Item tab shall be completed if costs are involved include:

- Damage to State highway (whether known or unknown third party).
- All spills
- Major damage (storms, earthquakes, fires, etc.) when Project Number is required.
- Major Maintenance
- All stormwater related work activity (all “F” Family work).
- Adopt-A-Highway (Landfill Disposal).

It is very important to include accurate information in the Extra Item tab. The invoice for the service or materials should reflect the same amount reflected in the Extra Item tab.

The Service Request number and Project Number (if applicable) shall be written on retained copies of all invoices for future reference.

All such invoices should be kept on file per the State retention schedule in the event costs need to be verified at a later date.

Extra Item tab expenditures DO NOT process through TRAMS. Extra Item expenditures are only reflected in IMMS.

Changes to the Extra Item tab after interface will require a post interface correction.

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Costs Tab – EXTRA ITEM - (Continued)

The screenshot shows a software window titled "Extra Item Cost". It contains several input fields and a text area, each with a circled number indicating its function:

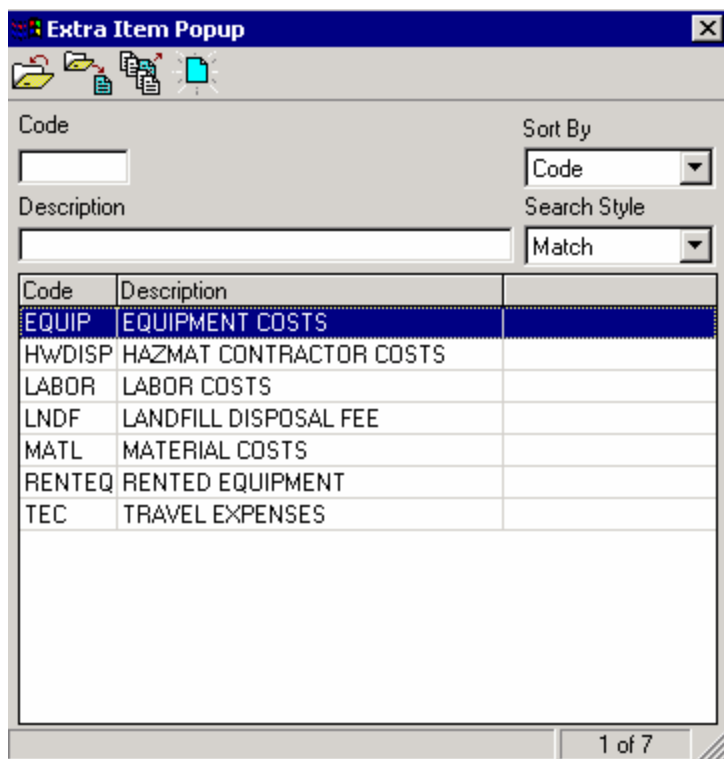
- 1**: Activity field
- 2**: Task field
- 3**: Charge field
- 4**: To (time) field
- 5**: Budget # field
- 6**: Extra Item field
- 7**: Quantity field (containing ".00")
- 8**: Rate field (containing "0.0000")
- 9**: Comments text area

- **01 Activity**
Auto-populates with Activity that has been entered on Work Order.
- **02 Task** [NOT USED]
- **03 Charge**
Auto-populates with the work date and time entered on Work Order tab.
- **04 To (time)** [NOT USED]
- **05 Budget** [NOT USED]
- **06 Extra Item**
"Pop-up" in this field to view the Extra Item Codes.
Select the appropriate code for your needs.
- **07 Quantity**
Number of items
- **08 Rate**
Cost per item
- **09 Comments**
Comments should be used to provide any additional details needed, including defining the quantity and description of the Extra Item.

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Costs Tab – EXTRA ITEM (Continued)

Below are the list of options that can be used for Extra Item tab reporting.



The screenshot shows a window titled "Extra Item Popup" with a toolbar containing icons for file operations. Below the toolbar are input fields for "Code" and "Description", and dropdown menus for "Sort By" (set to "Code") and "Search Style" (set to "Match"). A table lists the following items:

Code	Description
EQUIP	EQUIPMENT COSTS
HWDISP	HAZMAT CONTRACTOR COSTS
LABOR	LABOR COSTS
LNDF	LANDFILL DISPOSAL FEE
MATL	MATERIAL COSTS
RENTEQ	RENTED EQUIPMENT
TEC	TRAVEL EXPENSES

The status bar at the bottom indicates "1 of 7".

On the following pages are business rules that apply to each of the Extra Items.

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Costs Tab – EXTRA ITEM (Continued)

EQUIPMENT COSTS

Extra Item Cost

Activity: M90000 EMERGENCY TRAFFIC CONTROL

Task:

Charge: 10/27/2004 11:20 to / / :

Budget #:

Extra Item: EQUIP EQUIPMENT COSTS

Quantity: 2.00 Rate: 1.9400

Comments: TMC equipment for additional traffic control. Operated by Maintenance employee. Rate is hourly.

Extra Item Equipment costs include equipment that is not included in the Maintenance vehicle C and Item inventory, and which cannot be recorded in the Work Order as a Vehicle. The owner of the equipment should provide the cost for use of the equipment.

If the equipment can be recorded as vehicle in the Vehicle Cost tab, the equipment shall be recorded in vehicle charges to the Work Order, not as an Extra Item.

Do not record “equipment rental” charges here. Use the Equipment Rental Extra Item Code.

July 2005

Costs Tab – EXTRA ITEM - (Continued)

HAZMAT CONTRACTOR COSTS

The screenshot shows a software window titled "Extra Item Cost". It contains several input fields and a text area. The "Activity" field is set to "D50000" and "SPILLS RWY, LANE, SHLDR & APPURT". The "Charge" field shows a date and time "08/09/2004 07:43" followed by "to" and empty fields. The "Extra Item" field is set to "HWDISP" and "HAZMAT CONTRACTOR COSTS". Below this, there are fields for "Quantity" (1.00) and "Rate" (210.0000) with a multiplication symbol between them. The "Comments" text area contains the following text: "Hazmat contractor costs for PARC Environmental. Labor= \$41.00. Equipment= \$15.00 Disposal= \$154.00".

The Extra Item HAZMAT Contractor Costs tab should include actual final costs, not estimates.

Hazmat contractor costs must be recorded in the Extra Item tab. "Quantity" should be 1.0 (one incident), and the "Rate" should reflect the total cost of the services provided by the Hazmat contractor. This total cost must reflect the total cost on the invoice. In the "Comments" section, a general break down of costs should be included.

If more than one contractor is used at the scene of the incident, a separate Extra Item tab entry should be created for each contractor.

The responsibility for completing the Extra Item HAZMAT Contractor Cost tab varies by district. Supervisors must be familiar with the requirements for their district. Questions regarding district specific policy should be directed to the District HAZMAT Coordinator.

Note : In addition to the Extra Item Hazmat option, Hazmat incidents may include charges that require recording information in other Extra Item options; including Rental Equipment, Labor, Travel Expenses, Materials, or Landfill Disposal. Refer to the most current "IMMS Hazmat Reporting Instructions".

July 2005

Costs Tab – EXTRA ITEM (Continued)

LABOR COSTS

Extra Item Cost

Activity: M90000 EMERGENCY TRAFFIC CONTROL

Task:

Charge: 10/27/2004 11:20 to / / :

Budget #:

Extra Item: LABOR LABOR COSTS

Quantity: 1.00 x Rate: 267.0300

Comments: Maintenance Area Superintendent providing coordination at the scene. Billing Labor Rate is 89.01 per hour for 3 hours.

The Labor Costs option of the Extra Item tab is used to capture labor expenses for employees that do not record their time in IMMS. Examples include Maintenance Area Superintendents, and employees from other Divisions such as Traffic Operations.

It is important to use the most current overhead rate. Contact your region office to insure you are using the proper rates.

July 2005

Costs Tab – EXTRA ITEM (Continued)

LANDFILL DISPOSAL FEE

The screenshot shows a software window titled "Extra Item Cost". The form contains the following fields and values:

Activity	D40100 LITTER CONTROL ROADWAY/LNDSCP		
Task			
Charge	07/08/2004	14:00	to / / :
Budget #			
Extra Item	LNDF LANDFILL DISPOSAL FEE		
Quantity	1.00		x Rate 55.8000
Comments	1 LOAD		

The Extra Item tab Landfill Disposal option is used to record fees charged when disposing of debris at landfill sites. "Quantity" should reflect unit of measure the ticket or invoice reflects.

Examples: "load" or "cubic yard".

July 2005

Costs Tab – EXTRA ITEM (Continued)

MATERIAL COSTS

The screenshot shows a software window titled "Extra Item Cost". It contains several input fields and a text area. The "Activity" field is set to "E30010" and "IRRIGATION SYSTEM REPAIR INDSC". The "Task" field is empty. The "Charge" field shows a date "11/12/2004" and a time "07:30", followed by "to" and empty fields for month, day, and year. The "Budget #" field is empty. The "Extra Item" field is set to "MATL" and "MATERIAL COSTS". Below this, there are fields for "Quantity" (set to "1.00") and "Rate" (set to "3.4400"), with a multiplication sign between them. The "Comments" text area contains the text: "1/2 inch brass fitting for backflow preventer repair. Purchased Ace Hardware - credit card."

Activity	E30010	IRRIGATION SYSTEM REPAIR INDSC
Task		
Charge	11/12/2004 07:30	to / / :
Budget #		
Extra Item	MATL	MATERIAL COSTS
Quantity	1.00	x Rate
		3.4400
Comments	1/2 inch brass fitting for backflow preventer repair. Purchased Ace Hardware - credit card.	

The Extra Item Materials option can be used to record material purchases that cannot be charged out from PARTS (no SVS Number), and is not available from the district or region warehouse. These purchases are normally incidental and are paid with credit card.

July 2005

Costs Tab – EXTRA ITEM (Continued)

RENTED EQUIPMENT

The screenshot shows a software window titled "Extra Item Cost". It contains several input fields and a comments section. The "Activity" field is set to "S40010 MAJOR SLIDE/SLIP REMOVE/REPAIR". The "Charge" field shows a date "10/27/2004" and a time "12:51", followed by "to" and empty fields for a range. The "Extra Item" field is set to "RENTEQ RENTED EQUIPMENT". Below this, there are fields for "Quantity" (set to "1.00") and "Rate" (set to "771.5900"), with a multiplication symbol between them. The "Comments" section at the bottom contains the text: "6 rented light stands. | Rate is total rental cost for 24 hours. Invoice number 34738766-001".

Activity	S40010 MAJOR SLIDE/SLIP REMOVE/REPAIR	
Task		
Charge	10/27/2004 12:51	to / / :
Budget #		
Extra Item	RENTEQ RENTED EQUIPMENT	
Quantity	1.00	x
Rate		771.5900
Comments	6 rented light stands. Rate is total rental cost for 24 hours. Invoice number 34738766-001	

Extra Item Rental Equipment includes vehicles or equipment that are rented (charges will also be reflected in Object Code 007 in TRAMS when the M8(s) have been processed). Do not record equipment or vehicles here that are owned by Caltrans.

Contact the District Equipment Manager or the Contract Manager that is responsible for the rental equipment contract to insure you are recording accurate daily charges.

“Quantity” should reflect (1) if rental for entire day with daily rental rate recorded in rate. Or, if only charged for partial day, Quantity should reflect number of hours, and the hourly rate.

If additional charges are incurred such as vendor charges for flat tire or wear part replacement which should be charged to the job, such charges can be added to Extra Item tab (along with comments) at a later date.

July 2005

Costs Tab – EXTRA ITEM (Continued)

TRAVEL EXPENSES

The screenshot shows a software window titled "Extra Item Cost". It contains several input fields and a list of items. The "Activity" field is set to "S40010 MAJOR SLIDE/SLIP REMOVE/REPAIR". The "Charge" field shows a date "10/27/2004" and a time "12:51". The "Extra Item" field is set to "TEC TRAVEL EXPENSES". Below this, there is a table with "Quantity" and "Rate" columns. The first row shows a quantity of "1.00" and a rate of "18.0000". The "Comments" field contains the text "3 Overtime meal allowances @ 6.00 each due to extended shift." followed by a list of names and amounts: "Jones 6.00", "Adams 6.00", and "Smith 6.00".

Quantity	Rate
1.00	18.0000

Comments: 3 Overtime meal allowances @ 6.00 each due to extended shift.
Jones 6.00
Adams 6.00
Smith 6.00

Travel Expenses for Caltrans employees should be entered in the Extra Item Travel Expense option. This includes all travel expenses including airfare, per-diem, rental car, or overtime meal allowances.

NOTE: Comments can be added to the Labor Cost tab but will not print to any reports generated. If comments are needed on reports, the Work Order Comments tab should be used.

July 2006

WORK ORDER – Costs Tab – Labor Costs - TASK Required – if applicable

The TASK field on the Labor Cost tab can be used to provide an additional breakdown of work activity for each person, and is required with some Activities.

The "TASK" shall be used when **Inspection, Complaint Investigation, or USA** results in, or is part of a maintenance work operation. As an example, a Supervisor investigates a sign complaint, and determines that the complaint will result in sign repair. A Work Order can be created using the IMMS Activity for sign repair/replace. The TASK is used to record the time and vehicle investigating the complaint on the same Work Order used to record repairing the sign.

The screenshot shows the 'Work Order' application window with the 'Labor Cost' tab selected. The 'Activity' field is set to 'M40010 REPAIR/REPLACE' and 'SIGNS'. The 'Task' field is set to 'INVCPL'. Below this, the 'Task Definition PopUp' window is open, displaying a list of tasks. The 'INVCPL' task is highlighted in the list.

Task	Description
BLAST	ABRASIVE BLAST
CLEAN	MECHANICAL/HAND CLEANING
INSPCT	INSPECTION ACTIVITY
INVCPL	INVESTIGATE COMPLAINTS
OJT	ON THE JOB TRAINING
WASH	PRESSURE WASH

If Inspection, Complaint Investigation, or USA is not directly related to, or does not result in a work operation, a Work Order shall be created, and the Inspection, Complaint Investigation, or USA Activity from the appropriate Family shall be used.

Note: **Do not** use the TASK to record the inspections listed below. Follow Maintenance Manual Volume Two or other current policy for:

- C30001 – Tree Inspection Roadside
- C61001 – When charging time for Culvert Inspection Program
- All "M" Family Night Inspection Activities
- All "F", "J", "K", and "Y" inspection related Activities.

July 2005

2.06.4 WORK ORDER - Costs Tab - MATERIAL Required – if applicable

Materials charged to the Work Order can be viewed.

Work Order # 628154 Roadway

Asset RW 06-KIN-198 From 10.500 RPM To 10.500 RPM

Element XSP WO Type WO

Activity A10040 DIG OUT FLEX LANE

Part Number	Quantity	Cost	Part Description	Direct Shipment Trn
5610-07042	10.00	31.50	ASPHALT EMULSION ALL TYPES	
5610-02256	15.00	589.35	ASPHALT CONCRETE ALL SIZES	

Total 620.85

Contractor Extra Item Labor Material Tool Vehicle Summary

Work Order Comments Activities Failures Costs Standard Spot Insp Log Applications Schedule A

WORK ORDER Costs Tab “TOOL” - NOT USED

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2.06.5 WORK ORDER - Costs Tab - VEHICLE Required – if applicable

Work Order # 15029 Roadway

Asset RW 01-DN-101 From 0.000 MPM To 0.000 MPM

Element XSP WO Type WO

Activity A10001 INSPECTION FLEX LANE

SRC	Activity	Task	Charge Date	Type	ID	Usage
A10001			12/03/2001	20.00	001008	0010005

WO Total 26.16

Vehicle Cost

☐ Crew ☐ Vehicle Type ☒ Vehicle

Activity A10001

Task

Charge 1 12/04/2001 12:57 to / / :

Budget #

Vehicle ID 2

Operator 3

Usage 0.00 Rate 0.0000 Total Usage Reading 0.00

Comments

- **01 Charge**
Charge date and time the vehicle was used.
- **02 Vehicle ID**
ID# of vehicle used. “Pop up” to view your vehicle list.
- **03 Operator**
“Pop up” and select the operator. A list of personnel charged to the Work Order will appear. If the operator is towing an additional vehicle/equipment, the operator will be responsible for that vehicle/equipment as well.

Note:

Comments can be added here but will not print to any reports generated. If comments are needed on reports generated, use the Work Order Comments tab.

Usage should be the number of hours vehicle was used.

Vehicle downtime is **not** recorded in IMMS.

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2.06.6 WORK ORDER - Costs Tab - SUMMARY

The Summary tab is used to view all labor, vehicle, and material charges to date for the Work Order. Summary tab can be used to double check costs.

Work Order # 602751 Roadway

Asset RW 06-TUL-099 From 53.400 RPM To 53.400 RPM

Element XSP WO Type WO

Activity A10030 PATCH POT HOLES FLEX LANE

SRC	Activity	Task	Charge Date	Crew Type	Job Class	Employee ID
A10030			07/07/2004 06:30	6286	100373	
A10030			07/07/2004 06:30	6301	102448	
A10030			07/07/2004 06:30	6890	103625	
A10030			07/07/2004 06:30	6286	105064	
A10030			07/07/2004 06:30	6286	107532	
A10030			07/07/2004 06:30	6286	106561	
A10030			07/06/2004 06:30	6890	103625	
A10030			07/06/2004 06:30	6285	103397	

WO Total 814.99 Group Total 814.99

Contractor Extra Item Labor Material Tool Vehicle Summary

Work Order Comments Activities Failures Costs Standard Spot Insp Log Applications Schedule A

Work Order # 602751 Roadway

Asset RW 06-TUL-099 From 53.400 RPM To 53.400 RPM

Element XSP WO Type WO

Activity A10030 PATCH POT HOLES FLEX LANE

SRC	Activity	Task	Charge Date	Type	ID	Usage
A10030			07/07/2004 06:30	54801	5486557	

Vehicle Cost

Crew Vehicle Type Vehicle

Activity A10030 PATCH POT HOLES FLEX LANE

Task

Charge 07/07/2004 06:30 to 07/07/2004 08:30

Budget #

Vehicle ID 5486557 SIGN PASS SEQUENTIAL ARROW 4FT

Operator 103625

Usage 2.00 HR Rate 1.2300 Total Usage Reading 2.00

Comments

2.7 WORK ORDER – SPOT INSPECTION TAB Required – if applicable

The Spot Inspection tab provides an opportunity to capture additional production unit details, if the district wants to collect this information. Any requirement to use Spot Inspection tab will be included with individual Activity Instruction, or issued by the district for district specific policy.

The screenshot shows the 'Spot Inspection' form with the following fields and callouts:

- 1**: Spot Insp (dropdown menu)
- 2**: UM (Unit of Measure)
- 3**: Completed (time field, showing :00)
- 4**: Value (quantity field)
- 5**: Comments (text area)

- **01 Spot Inspection**
“Pop-up” in this field and select the Spot Inspection option. (See pop-up example below).
- **02 Unit of Measure (UM)**
This field will populate with the unit of measure when the Spot Inspection option is selected.
- **03 Completed**
Auto-populates with the time entered on Work Order tab.
- **04 Value**
Enter the quantity of units accomplished.
- **05 Comments**
Any comments specific to Spot Inspection information.

The screenshot shows the 'Spot Inspection Dtl Popup' window with the following fields and list:

Code: Sort By:

Description: Search Style:

Code	Description
BAGCNT	ADOPT-A-HIGHWAY BAG COUNT
BRNACR	CONTROLLED BURN ACRES
BRNROV	DID BURN LEAVE RIGHT OF WAY?
BRNXSP	BURN CROSS SECTIONAL POSITION
CARCAS	1032 CARCASS REMOVAL
CNTYAG	COUNTY AG APPROVAL
CU YRD	CUBIC YARDS OF MATERIAL
DEBRIS	DEBRIS AND TIRES
DEW PT	DEW POINT (DEGREES FAHRENHEI
DRWBDR	DRAWBRIDGE OPENINGS
DUST1	DUST CONTROL USING WATER
DUST2	VACUUM DUST CONTROL
DUST3	OPTIONAL DCM USED
DUST4	STOCKPILE/TRACKOUT CLEANUP
EMERG	TYPE OF EMERGENCY
LINF	LINEAR FEET
MAGNTE	MAGNITUDE
MOW	ACRES MOWED
RELHUM	RELATIVE HUMIDITY
SPRAY	ACRES SPRAYED
TEMP-A	AIR TEMP (DEGREES FAHRENHEIT)
TEMP-S	SURFACE TEMP (DGRS FAHRENHEI
TREE	TREE REMOVAL REASON

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2.8 WORK ORDER - LOG TAB

The Work Order Log tab can be used to record date and time of various milestones during the course of an incident. If a Service Request is created, the Log tab on the Service Request can be used.

(See Chapter 6, “Other IMMS Reporting Requirements” for information regarding the Service Request Log tab).

The screenshot shows the 'Log' tab interface. It includes a 'Log Type' dropdown menu (1), a 'Log Date' field (2) and a 'To' field (3), an 'Entered By' field (4), and a large 'Comments' text area (5). The interface also features a toolbar with various icons and a 'Log' button at the bottom left.

- **01 Log Type**
Select option from pop-up. (See Log Type pop-up sample below).
- **02 Log Date**
Populates with date and time on Work Order tab when Log tab is updated.
Date and time must be changed to reflect actual date and time Log Type option occurred.
- **03 Log Date “To”**
Complete if applicable.
- **04 Entered by**
Populates with ID of person costing Work Order when Log tab is updated.
- **05 Comments** Comments regarding option entries should be entered here.

The screenshot shows the 'Log Type Pop-up' window. It contains a table with two columns: 'Code' and 'Description'. The table lists various incident codes and their corresponding descriptions. The '10-10' code is highlighted in blue.

Code	Description
10-10	OUT OF SERVICE
10-7	OFF THE AIR
10-8	10-8 IN SERVICE
10-97	ARRIVED ON SCENE
10-98	ASSIGNMENT COMPLETE
CLASS	CLASS
DSPTCH	NOTIFIED RESPONSIBLE DISPATCHER
LN CLS	LANE CLOSURES
MEET	MEETING
NOTIFI	NOTIFIED/CALLED
SR-UPD	SERVICE REQUEST REASSIGNMENT
UPDATE	UPDATE SERVICE REQUEST
UTL	UNABLE TO LOCATE/GONE ON ARR
VAC	VACATION
WO-UPD	WORK ORDER CHANGE

At the bottom of the window, it indicates '1 of 15'.

WORK ORDER - Applications Tab - NOT USED

WORK ORDER – Schedule Tab – NOT USED

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2.9 WORK ORDER - ADDITIONAL TAB

2.09.1 Standard Additional Tab Required – as applicable

- **01 Charge District**
Charge District is the district the work was performed for.
- **02 EA**
A Maintenance EA will automatically generate in the EA field based on Activity chosen during creation of the Work Order. Reimbursable Expenditure Authorizations (EA's) are required when Maintenance has been authorized to charge against approved functions. Always read the Special Reporting Requirements for the Activity you are using, or contact your District IMMS Coordinator to determine if a reimbursable EA is required **before creating the Work Order**. See Chapter 10, "Coding Definitions" for general information regarding Expenditure Authorizations.
- **03 Subjob**
A Subjob is used when more specific identification than just the EA is required for cost control and billing purposes. As an example, a Subjob allows expenditures for toll bridges to be broken down to tow service, toll booth, etc. (See Special Reporting Requirements included with each Activity to determine if a Subjob is required).
- **04 Special Designation (Special D)**
Used to isolate costs for problems or special projects. (See Special Reporting Requirements included with each Activity to determine if a Special D is required).

Note: District IMMS Coordinators may request new Special Designation Numbers. The new number will not be available in the system until approved and added to the system by Headquarters IMMS. For new requests, a Project Number should be considered instead of a Special Designation when possible. Project Numbers can be added to a Work Order later. Special Designations cannot be added later without post-interface correction. However, if there is a need to generate reports through TRAMS, or if staff does not report in IMMS, a Special Designation must be used.
- **05 F.A. Elig. Code**
Determines whether the particular job eligible for Federal funds. The number must be 1 or 2. A '1' designates Federal reimbursement; a '2' indicates State funding only. Normally, entry is 2.
- **06 TRAMS Activity Code**
Required field. Does not default to 036. Always read the Special Reporting Requirements included with each Activity Instruction to determine if an Activity Code other than 036 is required. See Chapter 10, "Coding Definitions" for general guidelines and definitions for commonly used codes.
- **07 Production Units and Support Activities** – See following page.

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2.09.2 Additional Tab - Production Unit and Support ActivitiesRequired – as applicable

➤ **08 Work Date**

This field auto-populates with date Work Order is initiated.

➤ **09 Production Units**

It is very important to provide accurate production units.

See Production Unit Calculation section included with the instructions for each Maintenance Activity. Some Activities include tips on how to determine production units completed.

Note: When production units are entered in this field, the “Quantity” field on the Work Order will auto-populate with the cumulative total. The “Quantity” field is read only.

➤ **10 Units**

Will be provided by the system based on the Activity selected.

➤ **11 Travel (Person Miles)**

Total person miles traveled. (Example: 2 people at 10 miles = 20 miles)

Includes all time spent on travel and/or haul. Also includes transfer of equipment, which would be reported to the last Activity worked on, or the next Activity in which the equipment will be used.

Note: See Activity Instruction for Y30000 regarding transporting equipment for the shop.

➤ **12 Travel Person Hours**

Total person hours traveled. (Example: 2 people at 2 hours = 4 hours)

➤ **13 Delays (Each Occurrence)**

Includes material, equipment breakdown, standby due to traffic or weather, and other miscellaneous delays. Delays should only be charged for unforeseen delays, when switching to another work activity would not be cost effective, or would be unsafe for workers or the traveling public.

➤ **14 Delays Person Hours**

Total person hours delayed. (Example: 2 people at 1 hour = 2 hours)

➤ **15 Traffic Control Hours**

Includes time spent flagging traffic through or around a work area; and time spent setting up lane closures. Also includes time spent operating pilot car or shadow vehicle, and time spent as lookout.

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Additional Tab – PRODUCTION UNIT AND SUPPORT ACTIVITIES - (Continued)

➤ **16 Equipment Preparation Hours**

Routine daily equipment pre-op and post-op should be charged under equipment preparation for the applicable Maintenance Activity where the equipment will be used.

Preventative maintenance, minor repairs, and assistance to the mechanic are charged to the Maintenance Activity where the equipment will be used for the first ½ clock hour. If time spent on these activities will exceed ½ clock hour, see Y10000 and Y20000 Maintenance Activities for instructions.

Note: Approval from the Equipment Shop is required before charging to Y10000, Y20000, and Y30000.

CLOCK HOUR DEFINITION:

Actual clock time such as 0800 to 0830.

Examples:

Two people working one hour, each assisting the mechanic:

1 hour will be charged to equipment preparation to the Maintenance Activity where the equipment will be used.

1 hour will be charged to Y10000 with Shop approval.

Two people working ½ hour each assisting the mechanic.

1 hour will be charged to equipment preparation to the Maintenance Activity where the equipment will be used.

➤ **17 Comments**

Any comments related to production units and support activities that may be needed for future reference.

Note : If “printable” comments are needed, use Work Order Comments tab.

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2.09.3 WORK ORDER – Additional Tab – CHEMICAL Required – if applicable

Work Order # 668433 Roadway

Asset RW 03-SAC-050 From 1.400 MI To 2.100 MI

Element XSP W/O Type W/O

Activity E10012 CHEMICAL CONTROL LANDSCAPE

Charge District 03 EA Subjob

Special D

F.A. Elig Code 2 Activity 036

Production Units and Support Activities

Work Date	Production U	Units	Trav
10/06/2004	2.000	ACRE	30

Chemical Usage Data

Usage Date	Employee ID	Safety Dev
10/06/2004	0103427	M4
10/06/2004	0103427	A6
10/06/2004	0102107	
10/06/2004	0103427	

Pesticide Use Recommendation

Number 128 ☒ Completed

Expire Date 10/6/30/2005

Applicator # 24618

Date of Record Weather Area

10/06/2004	air, clear	80
------------	------------	----

Work Order Comments Activities Failures Costs Standard Spot Insp Log Applications Schedule

1 2 3 4

NOTE : ALWAYS CHARGE LABOR TO WORK ORDER BEFORE COMPLETING THIS SECTION

➤ **01 Applicator #**

Enter the Qualified Application Certificate (QAC) number of the applicator. If the applicator does not have a number, then enter the QAC number of the leadworker or supervisor.

➤ **02 Pesticide Use Recommendation**

California law requires that a Pesticide Use Recommendation written by a licensed Pest Control Advisor (PCA) is present for any pesticide application made on Caltrans right of way. Applying any pesticide, from a small hand-held spray applicator or by hand with a brush, without a PCA Recommendation, is a violation of the law.

Enter the number of the PCA Recommendation for the location being treated.

➤ **03 Completed**

Check the “Completed” box if the Recommendation will not be used again before the expiration date of the Recommendation.

➤ **04 Expire Date**

Enter the expiration date of the Recommendation.

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Additional Tab – CHEMICAL - (Continued)

The screenshot shows a software window titled "Chemical Usage". It contains a list of fields for recording chemical application data. Numbered callouts (5-17) point to the following fields:

Callout Number	Field Name	Value
5	Date of Record	10/06/2004
6	Weather	fair, clear
7	Area Temperature	80.0
8	Wind Direction	S
9	Velocity Min	0.00
10	Velocity Max	3.00
11	Endangered Spec./Fert	n
12	Parks	n
13	Computer Calc. Spray	N
14	Water (GPA)	100
15	Spray Hours (Exposure)	6
16	Total Water Used	200
17	Number of Applications	1

CHEMICAL USAGE REPORT

This table is used to capture pertinent information about the application.

- **05 Date of Record**
This field will automatically populate with the date of the application.
- **06 Weather**
Enter a summary explanation of the weather conditions during the application (sunny, cloudy, partly cloudy, overcast, etc.).
- **07 Air Temperature**
Enter the air temperature (degrees Fahrenheit) in effect for the duration of application. Normally, the "highest temperature" for the duration of the application should be entered unless otherwise directed on the Recommendation or by the District Landscape Specialist.
- **08 Wind Direction**
Select from the pop-up menu the wind direction at the application location.
- **09 Velocity Minimum**
Enter the lowest wind speed during the application.

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Additional Tab – CHEMICAL (Continued)

➤ **10 Velocity Maximum**

Enter the highest wind speed during the application.

➤ **11 Endangered Spec./Fert.**

Enter the fertilizer code here if this chemical can also be used as a pesticide. Enter an endangered species code if applicable. If applicable, the code should be included on the Recommendation or provided by the District Landscape Specialist.

➤ **12 Parks**

Enter the code for a Federal or State park if applying inside a Federal or State park. If applicable, the code should be included on the Recommendation or provided by the District Landscape Specialist.

Enter a “Y” for yes, and an “N” for no when applying in a park if the code for the Federal or State park is unknown.

➤ **13 Computer Calc. Spray**

Enter “Y” if using a computer calculated spray rig, “N” if not. Enter “N” if the computer rig has been converted to a tank mix rig.

➤ **14 Water (GPA)**

Enter the gallons per acre (GPA) **used as a carrier**. As an example: If rate of 128 oz. Roundup herbicide “per 100 gallons” of water per acre were used, and two hundred gallons total applied, enter “200” in this field.

➤ **15 Spray Hours (Exposure)**

Enter the actual hours of exposure to the pesticide(s). This would include mixing, loading, spraying, etc. Enter number of hours of operation. Do not multiply hours by number of crew members.

➤ **16 Total Water Used**

Enter the total gallons of water used during this application.

➤ **17 Number of Applications**

Number of applications is the number of operations in one segment. Even if it takes more than one load to complete the task, it would still be one application.

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Additional Tab – CHEMICAL (Continued)

The screenshot shows a 'Safety Device' form with the following fields and values:

Field	Value
Usage Date	10/06/2004 07:00
Employee ID	103427
Safety Device	M4
Usage Hrs.	1.00
Respirator Hrs.	0.00

Numbered callouts on the left side of the form point to the following fields:

- 18: Usage Date
- 19: Employee ID
- 20: Safety Device
- 21: Usage Hrs.
- 22: Respirator Hrs.

CHEMICAL USAGE DATA TABLE

This section is for reporting applicator exposure and personal protective equipment (PPE) used. This section also generates an employee exposure record that must be kept for 30 years.

➤ **18 Usage Date**

This field will automatically populate with the date of application, as (mm/dd/yyyy) and time of the application, using the 24-hour clock. For example: 1 PM is 1300.

➤ **19 Employee ID**

This field will automatically populate with the ID number(s) of the employee(s) charged to the Work Order. You need to "Modify" to identify employees that mixed or applied chemical.

➤ **20 Safety Device**

Enter the safety device code that best fits the application from the pop-up table. See "Safety Device Codes" table on the following page for more information. Always contact your District Landscape Specialist if you have any questions about the appropriate safety devices that are required for the task being performed. An individual entry must be made for each employee. Multiple entries must be made for an employee if the combination of safety devices changes during the course of the day. For example, different safety devices and codes may be required if an employee mixes and applies chemical.

➤ **21 Usage hours**

Enter the number of hours the safety device was used.

➤ **22 Respirator Hours**

Enter the number of hours a respirator was worn during the application or mixing.

SEE SAFETY DEVICE CODES DESCRIPTIONS ON THE FOLLOWING PAGE.

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SAFETY DEVICE CODES

The appropriate code(s) should be entered on the Work Order CHEMICAL Additional Tab - SAFETY DEVICE form.

Mixer/ Loader	Ground Applicator	Toxicity Category	Safety Device Code	Protective Device Requirement Code
X		I-II	M1	ABCFGHR*
X		I-II	M2	ABCFGHR* + Label Requirements
X		III	M3	BCFGHR*
X		III	M4	BCFGHR* + Label Requirements
	X	I-II	A1	BCGHR*
	X	I-II	A2	BCGHR* + Label Requirements
	X	III	A5	CGHB*R*
	X	III	A6	CGHB*R* + Label Requirements

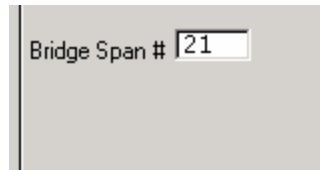
NOTE: In all cases: 1) Take precautions necessary to prevent exposure, and
2) Protective clothing or protective equipment is to be worn or utilized.

PROTECTIVE DEVICE REQUIREMENT CODE AND DESCRIPTION

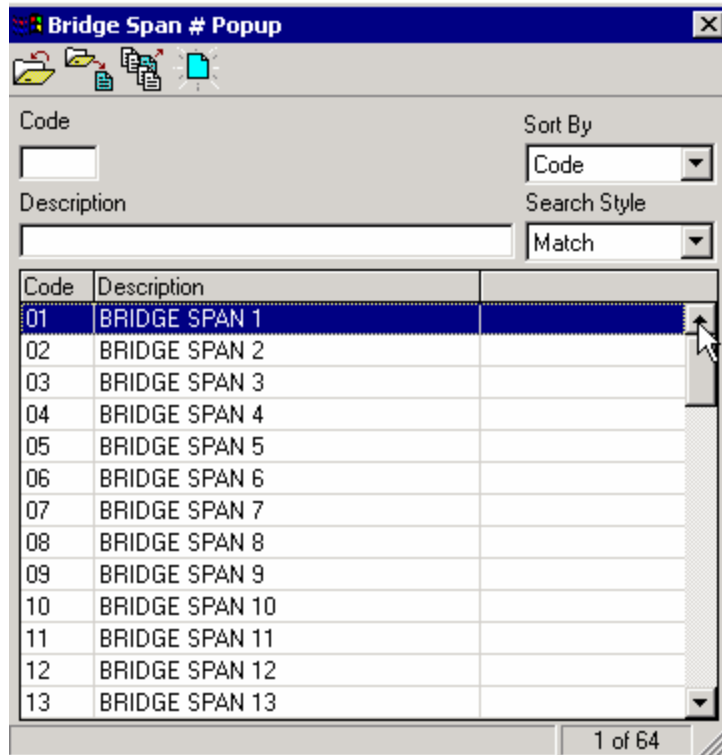
Code	Protective Device Requirement
A	Apron (Liquids only) - rubber or synthetic waterproof.
B	Boots or foot covering - rubber or synthetic waterproof.
C	Coveralls or clean outer clothing changed daily required for all employees handling Category I or II pesticides. A rain suit is required if there is a possibility of being wet with pesticide spray.
F	Face shield or goggles. Use face shields when handling liquids. Use goggles when handling dusts, wettable powders or granules.
G	Gloves - rubber or synthetic waterproof.
H	Hat - waterproof, washable hard hat or cloth type if laundered daily.
R	Respirator. A face shield is an acceptable substitute only when mixing/loading liquid formulations that do not have a vapor or fume hazard. However, if the label specifies that a canister-type gas mask is needed, a respirator is not adequate.
*	When there is a likelihood of exposure to spray mist, dust, or vapors.
**	Not applicable to 1) concentrate spraying in groves, orchards or vineyards (< 100 gal/Ac.) or, 2) enclosed greenhouse applications. For concentrate or greenhouse applications, use Toxicity Category I-II.

2.09.4 WORK ORDER - Additional Tab - BRIDGE Required if applicable

Bridge Span # Enter bridge span number when applicable. Select option from pop-up.



Bridge Span #



Bridge Span # Popup

Code:

Sort By:

Description:

Search Style:

Code	Description
01	BRIDGE SPAN 1
02	BRIDGE SPAN 2
03	BRIDGE SPAN 3
04	BRIDGE SPAN 4
05	BRIDGE SPAN 5
06	BRIDGE SPAN 6
07	BRIDGE SPAN 7
08	BRIDGE SPAN 8
09	BRIDGE SPAN 9
10	BRIDGE SPAN 10
11	BRIDGE SPAN 11
12	BRIDGE SPAN 12
13	BRIDGE SPAN 13

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2.09.5 WORK ORDER - Additional Tab – LIGHT/SIGNAL Required if applicable

Work Order # 614937 Roadway 03-BUT-032 11.980 11.980 MI

Asset SGNL Unit ID 03BUT032 -EH022 32 @ FOREST AVENUE

Address W/O Type GSM

Activity K40005 PM CHECK TRAFFIC SIGNALS

Charge District 03 EA Subjob

Special D EH022

F.A. Elig. Code 2 Activity 036

Electrical Trouble Call

Reported By 1 When 2

Reported as 3

X Streets 4

Arrival Time	Depart Time	Repair
09/17/2004 13:25	14:15	302

Production Units and Support Activities

Work Date	Production Units	Trav
-----------	------------------	------

Central Shop Repair

Compo	Component ID	Rep
-------	--------------	-----

Comments Activities Failures Costs Standard Spot Insp Log Applications Schedule Additional

- **01 Reported By**
Used to show person or agency reporting problem. (Non-required).
- **02 When**
Date and time contacted by reporting person or agency. (Non-required).
- **03 Reported As**
How the problem was described by reporting party. (Non-required).
- **04 Cross Street**
Can be used to better describe location. (Non-required).

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Additional Tab – LIGHT / SIGNAL (Continued)

ELECTRICAL TROUBLE CALL TABLE

The screenshot shows a software window titled "Electrical Trouble Call". It contains several input fields. On the left side of the form, there are numbered circles from 5 to 11, each with an arrow pointing to a specific field: 5 points to the Arrival Time field, 6 to the Depart Time field, 7 to the Repair Code 1 field, 8 to the Repair Code 2 field, 9 to the Repair Code 3 field, 10 to the Repair Code 4 field, and 11 to the Comments field. The Arrival Time field contains the date "09/17/2004" and the time "13:25". The Depart Time field contains "14:15". The Repair Code 1 field contains "302". The Repair Code 2, 3, and 4 fields are empty. The Comments field contains "MC".

Field Number	Field Name	Value
5	Arrival Time	09/17/2004 13:25
6	Depart Time	14:15
7	Repair Code 1	302
8	Repair Code 2	
9	Repair Code 3	
10	Repair Code 4	
11	Comments	MC

Information is required in this table for signal, flasher, and ramp meter field repairs. Filling out this tab is suggested when responding to Highway Lighting Knockdowns.

- **05 Arrival Time**
Arrival time at location. (Required for signal, flasher, and ramp meter repairs. Suggested when responding to Highway Lighting knockdowns).
- **06 Departure Time**
Departure time from location. (Required for signal, flasher, and ramp meter repairs. Suggested when responding to Highway Lighting Knockdowns).
- **07 Repair Code 1**
Code that best describes repair performed. (Required when using trouble call table).
- **08 Repair Code 2**
Additional repair code if needed.
- **09 Repair Code 3**
Additional repair code if needed.
- **10 Repair Code 4**
Additional repair code if needed.
- **11 Comments**
Use when additional information is needed regarding repairs performed.

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Additional Tab – LIGHT / SIGNAL (Continued)

CENTRAL SHOP REPAIR TABLE Required if applicable

The screenshot shows a software window titled "Central Shop Repair". It contains several input fields. Numbered callouts point to the following fields:

- 12: Points to the "Component Type" field, which contains the value "513".
- 13: Points to the "Component ID" field, which is empty.
- 14: Points to the "Repair Code 1" field, which contains the value "406".
- 15: Points to the "Repair Code 2" field, which is empty.
- 16: Points to the "Repair Code 3" field, which is empty.
- 17: Points to the "Comments" text area, which is empty.

This table is used to record all repairs performed in the central repair shops. (Required)

➤ **12 Component Type Table**

Used to record the type of component being repaired. (Required).

➤ **13 Component ID Table**

Used to record component serial number or some unique identifier.

➤ **14 Repair Code 1**

Code that best describes repair performed. (Required).

➤ **15 Repair Code 2**

Additional repair code if needed.

➤ **16 Repair Code 3**

Additional repair code if needed.

➤ **17 Comments**

Use when additional information is needed regarding repairs performed.

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2.10 WORK ORDER – Labor Other

IMMS “Labor Other” provides the opportunity for supervisors to record certain training and administrative time in a simple format without the detail required with a Work Order.

The Maintenance Activity, Special Designation, and TRAMS Activity Code (as reflected on the chart on the following page) will be automatically recorded in IMMS/TRAMS when Labor Other Code is used.

*See the IMMS Quick Reference Guide for instructions regarding **how to** record Labor Other time.*

Some examples of when not to use Labor Other :

Do not use if circumstances require coding which differ from what is described in the chart on the following page.

Do not use SUPR or TMAT as a method of routinely reporting the Maintenance Supervisor’s daily time. Labor Code SUPR results in charges to 5T4000, and TMAT to 5T7000, which is considered overhead.

Whenever possible, supervisors should charge their time to Work Orders. SUPR and TMAT are intended only to be used for work activity cannot be related to a job on a Work Order. Examples include time spent on paperwork directly related to supervision including personnel problems, and ordering/managing materials and supplies.

Do not use MODW (Modified Work) if the modified work relates to and can be charged to a Maintenance Activity other than the “W” Family.

Do not use OTT0 or OTT1 (Other Training) if a Special Designation is required.

Do not use if you need to record travel or vehicle usage.

See the following page for Labor Other coding options.

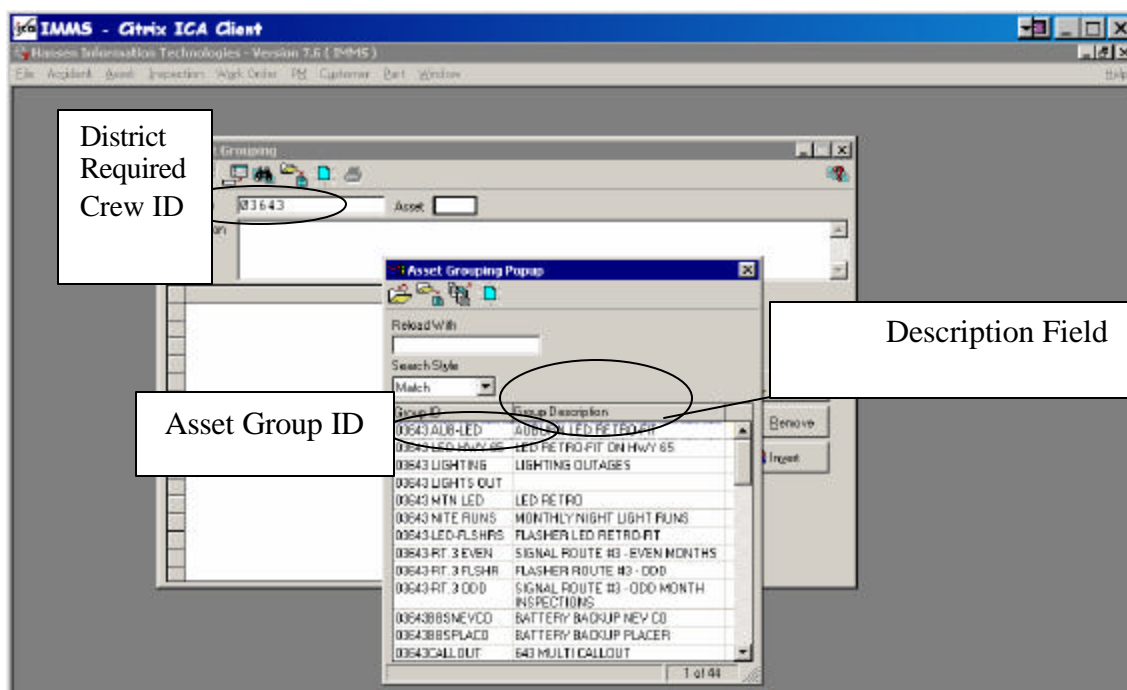
Labor Other Code	Description	This information is recorded when Labor Other code is used.				
		IMMS Activity	TRAMS CODE	Special D	FAE	TRAMS Activity
CKSN	Cooks Snow Support Personnel	R50000	5R5000		2	036
SNSS	Short Shift ATO - Snow	R90000	5R9000		2	036
STSS	Short Shift ATO - Storm	S90000	5S9000		2	036
SUPR	Supervision Non Work Order	T40000	5T4000		2	002
TMAT	Receiving/Issuing Materials	T70000	5T7000		2	036
LMD0	Legal/Mandated - Trainee	W10000	5W1000		2	059
LMD1	Legal/Mandated - Instructor	W10000	5W1000		2	058
LSB0	Substance Abuse Training	W10000	5W1000	MSUBS	2	059
LSFO	Safety Meeting	W10000	5W1000		2	049
LSX0	Sexual Harassment Training	W10000	5W1000	MSEXH	2	059
KNG0	Kingvale - Trainee	W20000	5W2000	MAKGVA	2	059
KNG1	Kingvale - Instructor	W20000	5W2000	MAKGVA	2	058
CKKG	Cooks Kingvale Operations	W20000	5W2000		2	036
MET0	META - Trainee	W30000	5W3000		2	059
MET1	META - Instructor	W30000	5W3000		2	058
OTT0	Other Training - Trainee	W40000	5W4000		2	059
OTT1	Other Training - Instructor	W40000	5W4000		2	058
ATO	Administrative Time Off	W50000	5W5000		2	099
MODW	Modified Duties	W50000	5W5000	MODW	2	036
DRUG	Drug Testing	W50000	5W5000	6DRGTS T	2	083
EXAM	Work On Exams/Testing	W90000	5W9000		2	015
SUPM	Supervisor Meetings	W90000	5W9000		2	036
SSFT	Short Shift ATO - All Other	W90000	5W9000		2	036

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2.11 WORK ORDER - GROUP PROJECTS

Group Projects in IMMS are used when carrying out a single Activity on a group of like assets. You can use Group Projects to create, cost, and complete Works Orders as a unit. IMMS also allows you to modify selected or individual Work Orders within the group.

Group Projects are created using an asset grouping. The asset grouping must be created prior to creating a Group Project. The asset grouping "Group ID" must begin with the "Crew ID" (two digit district number followed directly by the three digit cost center number). The rest of the Group ID can be anything that helps the creator remember the purpose of the asset grouping (see example). The Group ID can be up to sixteen characters. There is also a Description field (255 characters) that allows you to better describe the purpose of the grouping.



Directions for creating asset groupings and Group Projects can be found in the IMMS Training Manual and Quick Reference Guides.

COST DISTRIBUTION

Labor and vehicle costs can be distributed across selected Work Orders within a Group Project. These costs can be distributed two ways. Distributing costs by length will divide the costs by the length of the roadway on the selected Work Orders. Distributing costs by count will distribute the costs evenly among the Work Orders selected. (See examples).

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Group Project

Group Project # 10483 Group ID 03643 NITE RUNS Asset Type RW MI

Group Project Description NIGHT LIGHTING INSPECTIONS

Work Order Status All Both Properties

UFW	Unit ID	From	To	Work Order #	Activity	Status
03-NEV-049		0.00	31.18	380233	K20003	Assigned
03-NEV-267		0.00	2.79	380234	K20003	Assigned
03-NEV-089		0.00	8.70	380235	K20003	Assigned
03-NEV-080		0.00	31.34	380236	K20003	Assigned
03-NEV/PLA-020		0.00	44.47	380237	K20003	Assigned
03-PLA-049		0.00	11.37	380238	K20003	Assigned
03-PLA-089		0.00	21.74	380239	K20003	Assigned
03-PLA-193		0.00	10.43	380240	K20003	Assigned
03-PLA/NEV-080		0.00	69.77	380241	K20003	Assigned
03-PLA-065		0.00	20.36	380242	K20003	Assigned
03-NEV-174		0.00	10.21	380243	K20003	Assigned

Work Orders Predistributed Costs Comments

Work Orders selected 4 of 13

Open the Group Project and select the Work Orders to be costed.

Group Project

Group Project # 10483 Group ID 03643 NITE RUNS Asset Type RW MI

Group Project Description NIGHT LIGHTING INSPECTIONS

Charge Date	Crew Type	Job Class	Employee ID	Pay Type	Hours	Cost
09/18/2003	07:00	6924	104701	RD	8.00	09/18/2003
09/18/2003	07:00	6925	104779	RD	8.00	09/18/2003
09/18/2003	07:00	6924	107329	RD	8.00	09/18/2003

3 Employees – 8 hours

Total 1000.17

Contractor Extra Item Labor Material Vehicle Summary

Work Orders Predistributed Costs Comments

Insert labor costs

Select predistributed costs

Group Project

Group Project # 10483 Group ID 03643 NITE RUNS Asset Type RW MI

Group Project Description NIGHT LIGHTING INSPECTIONS

Charge Date	Type	ID	Usage	Charge Date To	Cost
09/18/2003	07:00	00830 0089802	8.00	09/18/2003 15:30	09/18/2003
09/18/2003	07:00	60248 6021174	8.00	09/18/2003 15:30	09/18/2003

2 Vehicles – 8 hours

Total 21.52

Contractor Extra Item Labor Material Vehicle Summary

Work Orders Predistributed Costs Comments

Insert vehicle costs

Select predistributed costs

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Group Project

Group Project # 10483 Group ID 03643 NITE RUNS Asset Type RW MI

Group Project Description NIGHT LIGHTING INSPECTIONS

Work Order Status All Both Properties

Distribute Cost by

Count Length

OK

Select All Deselect All Open Add Update Delete Distribute Cost

Work Orders Predistributed Costs Comments

Cost distribution progress

Work Order

Work Order # 380233 Roadway

Asset RW 03-NEV-049 From 0.000 PM To 32.637 RPM

Element XSP W/O Type GP

Activity K20003 NIGHT INSPECTION SIGN LIGHTING

Charge Date	Crew Type	Job Class	Employee ID	Pay Type	Hours
09/18/2003	07.00	6925	104779	RD	2.35
09/18/2003	07.00	6924	104701	RD	2.35
09/18/2003	07.00	6924	107329	RD	2.35

W/O Total 574.44 Group Total 574.44

Contractor Extra Item Labor Material Vehicle Summary

Work Order Comments Activities Failures Costs Standard Spot Insp Log Applications Schedule A

Work Order

Work Order # 380233 Roadway

Asset RW 03-NEV-089 From 0.000 PM To 8.702 RPM

Element XSP W/O Type GP

Activity K20003 NIGHT INSPECTION SIGN LIGHTING

Charge Date	Crew Type	Job Class	Employee ID	Pay Type	Hours
09/18/2003	07.00	6924	101417	RD	0.66
09/18/2003	07.00	6924	101924	RD	0.66
09/18/2003	07.00	6938	100527	RD	0.66

W/O Total 78.82 Group Total 78.82

Contractor Extra Item Labor Material Vehicle Summary

Work Order Comments Activities Failures Costs Standard Spot Insp Log Applications Schedule A

Work Order

Work Order # 380233 Roadway

Asset RW 03-NEV-049 From 0.000 PM To 32.637 RPM

Element XSP W/O Type GP

Activity K20003 NIGHT INSPECTION SIGN LIGHTING

Charge Date	Type	ID	Usage	Charge Date To
09/18/2003	07.00	60248	6021174	2.35 03/18/2003 09.21
09/18/2003	07.00	03379	0336700	2.35 03/18/2003 09.21

W/O Total 40.09 Group Total 40.09

Contractor Extra Item Labor Material Vehicle Summary

Work Order Comments Activities Failures Costs Standard Spot Insp Log Applications Schedule A

Select length cost distribution

Distribute costs

Labor cost has been distributed by length of roadway

Labor cost has been distributed by length of roadway

Vehicle cost has been distributed by length of roadway

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The 'Group Project' window displays a list of work orders with columns for Unit ID, From, and Status. A 'Distribute Cost by' dialog box is open, showing a table with columns for Count, Length, and a green checkmark. The dialog box has an 'OK' button.

Unit ID	From	Status
03-NEV-049	0.00	Assigned
03-NEV-267	0.00	Assigned
03-NEV-089	0.00	Assigned
03-NEV-080	0.00	Assigned
03-NEV/PLA-020	0.00	Assigned
03-PLA-049	0.00	Assigned
03-PLA-089	0.00	Assigned
03-PLA-193	10.43	Assigned
03-PLA/NEV-080	69.77	Assigned
03-PLA-065	20.36	Assigned
03-NEV-174	10.21	Assigned
03-PLA-020	10.21	Assigned

Cost distribution progress

Select count for even distribution

Distribute costs

The 'Work Order' window displays a table of charges with columns for Charge Date, Crew Type, Job Class, Employee ID, Pay Type, and Hours. The 'Hours' column is circled, showing a value of 2.00 for each row.

Charge Date	Crew Type	Job Class	Employee ID	Pay Type	Hours
09/18/2003	07:00	6924	101924	RD	2.00
09/18/2003	07:00	6938	100527	RD	2.00
09/18/2003	07:00	6924	101417	RD	2.00

WO Total 488.88 Group Total 488.88

8 hours of labor costs have been evenly distributed between the four Work Orders selected

The 'Work Order' window displays a table of charges with columns for Charge Date, Type, ID, Usage, and Charge Date To. The 'Usage' column is circled, showing a value of 2.00 for each row.

Charge Date	Type	ID	Usage	Charge Date To
09/18/2003	07:00	01382 0131201	2.00	09/18/2003 09:00
09/18/2003	07:00	10830 1080252	2.00	09/18/2003 09:00

WO Total 12.82 Group Total 12.82

8 hours of vehicle costs have been evenly distributed between the four Work Orders selected

Materials should never be distributed. Materials should be charged to the individual Work Orders.

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CHAPTER THREE

MANAGING MATERIALS AND SUPPLIES

TABLE OF CONTENTS

3.0	INTRODUCTION
3.1	MAINTENANCE DIRECTIVE
3.2	ROLES AND RESPONSIBILITIES
3.3	DEFINITIONS
3.4	IMMS PARTS
3.04.1	ADDING A NEW PART
3.04.2	SVS NUMBERS FOR ASPHALT
3.04.3	RECEIVING PARTS
3.04.4	ISSUING PARTS
3.04.5	ADJUSTING PARTS LEVELS
3.04.6	TRANSFERRING PARTS

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3.0 INTRODUCTION

This chapter includes business rules, and roles and responsibilities regarding materials purchasing and IMMS PARTS. For detailed instructions about “how to” perform tasks in IMMS including: add new Parts, receive Parts, issue Parts to a Work Order, adjust Parts levels, or transfer Parts between supervisors, please refer to the IMMS Crews Training Manual or Quick Reference Guide. The most current versions can be obtained at the Division of Maintenance/IMMS Intranet web site, or by contacting your District IMMS Coordinator.

3.1 MAINTENANCE DIRECTIVE

All Maintenance materials purchased by the Department of Transportation for future use shall be safely and securely stored in a Central Stores facility or District Maintenance Division Stock Areas, and shall be recorded in the SVS Material Management System inventory and the IMMS Parts system until charged to use.

Materials transferred (expensed) to the IMMS Parts system shall be stored securely and safely in Stock Areas, and monitored by Maintenance to assure that only “reasonable” quantities are retained. Responsibility for monitoring Working Stock materials rests with Maintenance Region Managers (can be delegated to Area Superintendents) on an individual supervisor/crew level, with oversight by the Deputy District Director, Maintenance. District stores facilities will be used whenever possible, and for as long as possible, before materials are transferred to local Working Stock storage areas. Materials in local Working Stock storage areas will be kept to a minimum.

IMMS PARTS consists of all materials stored in Stock Areas under the control of a Caltrans Maintenance Supervisor, and intended to be used within a reasonable time. The Maintenance Supervisor has the responsibility and accountability for all materials in their Working Stock.

These materials are considered to be expensed (charged from inventory) at the time of transfer from stores inventory. Materials placed in Parts must be applied to, or within a reasonable time, become a part of the highway system. The Maintenance Division has the responsibility to manage Working Stock storage areas, keep accurate records of materials in the Parts System of IMMS, and to charge out materials (showing usage) on IMMS Work Orders when they are used. Excess materials (those which will not be applied to the highway system within a reasonable time) in Parts shall be transferred back to SVS inventory. Supervisors should refrain from over ordering materials.

3.2 ROLES AND RESPONSIBILITIES

MAINTENANCE SUPERVISOR

- Maintain the safety and security of Parts materials in their Stock Area.
- Follow proper procedures for adding, receiving, issuing, and transferring Parts.
- Keep accurate records in the Parts system in IMMS, and charge materials accurately and timely on Work Orders.
- Refrain from over ordering materials, and transfer back to SVS inventory if materials will not be used in a reasonable amount of time.

MAINTENANCE AREA SUPERINTENDENT

- Adjust Parts levels in IMMS.
- Review cost center transaction listing (monthly/regularly).
- Adjust transactions as requested by supervisors, and request reasons for adjustment.
- Obtain approval from District Landscape Specialist prior to chemical adjustment.
- Monitor initial receipt transactions for correct rates when adding a Part to stock inventory for the first time.
- Adjust Part levels in their supervisors' Stock Areas if there are Part level errors.
- Choose Parts to be cycle counted on a monthly basis.
Maintenance Supervisors will print a Stock Information Inventory lookup report on a monthly basis for the cycle counting.
- Superintendents and District Landscape Specialists must print and review Adjustment Transactions lookup reports on a monthly basis.
- Monitor and do adjustments as needed to keep their supervisors' Parts levels correct.
- Monitor and provide feedback on "reasonableness".

DISTRICT IMMS COORDINATOR

- Generate Parts reports for district Maintenance usage.
- Monitor for reasonableness.
- Evaluate the Parts reports for management review purposes.
- Provide guidance in the adjustment process, or other processes as needed.

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MAINTENANCE REGION MANAGER

Monitor, plan, and guide the usage of materials at the region level. Be the decision maker on “reasonableness” of quantities of materials on hand, and the timeliness of usage. Assure that materials are processed along with other IMMS data in a timely manner. Monitor, plan, and guide the usage of chemicals and fertilizers at the region level.

MAINTENANCE SUPPORT STAFF

Review, monitor, guide, and control the work effort related to the usage of materials. Support staff will initiate periodic physical counts of Parts on a random sample basis.

Monitor, plan and guide the usage of chemicals and fertilizers at the district level.

DISTRICT LANDSCAPE SPECIALIST

The District Landscape Specialist is the decision maker on the quantities of chemicals and fertilizers needed for the operation. The Landscape Specialist is responsible for obtaining SVS numbers for new chemicals.

Monitor, plan, and guide the usage of chemicals and fertilizers at the district level.

DEPUTY DISTRICT DIRECTOR, MAINTENANCE

The Deputy District Director, Maintenance has overall responsibility and accountability for Maintenance material usage in the district.

HEADQUARTERS MAINTENANCE DIVISION

Parts balances and usage shall be reviewed, monitored, controlled, and evaluated by the Maintenance Division.

- Establish policy, and insure its implementation and compliance for all materials transferred to Parts and monitored by the IMMS Parts System.

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HEADQUARTERS OFFICE OF SPECIAL STUDIES - IMMS

- Provide training to first time IMMS end users, which includes training in IMMS Parts.
- Make resources available to all Maintenance staff, including IMMS training manuals, and IMMS Quick Reference Guides.
- Distribute and update as necessary, the Maintenance Manuals Volumes 1 and 2.
- Provide information to District Liaisons (Reviewers), which allows them to monitor Parts transactions.
- Address IMMS functionality problems, and facilitate system improvements as needs arise.

HEADQUARTERS LIASONS (DISTRICT REVIEWERS)

- Monitor and evaluate transactions to and from the IMMS Parts System (purchases and usage).
- Monitor for the timely use of materials in Parts.

3.3 DEFINITIONS

IMMS PARTS

For Maintenance purposes, purchased material must be accounted for and tracked as to where and how they are used. This is accomplished through the Maintenance SVS Material Management System. “Parts” are materials/items that are received and charged out through IMMS. A Working Stock Location is where Parts are stored at a Maintenance Supervisor’s location.

Parts are materials that have a value of more than five (5) dollars, and will become a permanent part of the highway system.

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INVENTORY

Inventory consists of all material and supplies meeting the definition contained in the Material Management Manual and recorded in the computerized Material Management System (SVS) at Headquarters or district stores locations. Responsibility and accountability for inventory remains with the Office of Procurement and Contracts and/or the line unit responsible for that inventory. Inventory does **not** include IMMS Parts.

5T7000

5T7000 is an Expenditure Authorization (EA) number (account) which has been set up to capture material costs associated with Maintenance overhead.

Materials that are charged to EA 5T7000 do not become a part of supervisors' Stock Areas. Materials charged (expensed) to this account should NOT be applied to, or become a part of, the highway or highway system.

Maintenance has the responsibility and accountability for all materials transferred to EA 5T7000. These materials are expensed at time of transfer to EA 5T7000. These overhead materials will be processed and accounted for by SVS. Examples of 5T7000 overhead materials might include gloves, hand tools, cones, portable work signs, etc.

5T7000 EXCEPTION

Materials that will ultimately become a part of the highway system, but cost less than \$5.00 each, may, at the discretion of the Deputy District Director, Maintenance, be charged to EA 5T7000. This exception recognizes administrative concerns of landscape and electrical crews that purchase many items at low unit cost. Low cost materials so charged to 5T7000 **cannot** be applied to IMMS Work Orders by county, route, post mile location, or for purposes such as accident damage reporting. These low cost materials shall be assessed to Maintenance overhead.

Materials anticipated to be used for, or charged to other purposes must be placed into the IMMS Parts System. However, incidental purchases made by the Maintenance Supervisor which are not available from the region, district, or from Headquarters, and cannot be assigned an SVS number, can be recorded on the Extra Item tab.

IMMS EXTRA ITEM TAB

The Extra Item Tab allows the supervisor to record certain material costs that cannot be charged out through their Parts, and is not available from region, district, or Headquarters warehouse (5T7000).

See Chapter 2, Section 2.06.2, for specific guidelines regarding the use of the Extra Item tab.

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3.4 IMMS PARTS

3.04.1 ADDING A NEW PART TO IMMS PARTS STOCK AREA

Supervisors may occasionally obtain new types of materials for their daily work.

The new materials must be added to the Maintenance Supervisor's Stock Area before the materials can be charged to Work Orders.

Any new Parts added to Stock Areas must first be added to the Service and Supply System (SVS) used by Statewide Materials Management.

Just as there must be a place in the yard to hold Parts, supervisors need to create a place for these Parts in IMMS. When you are adding a Part, you are adding only the Part number for it. You are not adding any information about how many of this Part you have.

The following rules apply to adding new parts to IMMS STOCK AREA:

The Maintenance Supervisor can take the following actions to add a Part number to their IMMS Stock Area:

- If a Part is listed in the Part Catalog, but it has never been stocked in the supervisor's Stock Area, he/she will add the new Part to their Parts location in IMMS.

Assistance from the District IMMS Coordinator or District Landscape Specialist will be required in the following cases:

- District IMMS Coordinator will get Part numbers from the State warehouses for any new types of Parts.
- The HQ Landscape Specialist gets all chemical-related Part numbers for all new chemicals.
- If two or more of the descriptions is the same, while this should rarely, if ever, be an issue, you may contact your District IMMS Coordinator to determine which Part to use and correct the problem.

The State Warehouse updates the IMMS Parts Catalog three times each week; on Monday, Wednesday, and Thursday.

Supervisor cannot add a Part to their Stock Area until the Part has been updated in the Parts catalog.

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3.04.2 IMMS PARTS - SVS NUMBERS FOR ASPHALT

The first time an SVS class/serial number is used by a cost center, the supervisor may initially set the price. Extreme caution should be taken to insure the initial price entered is accurate. Contact the region office or Area Superintendent for assistance if any doubt. Any additional price changes will be made through MAR process. Usually, the only time a price may be incorrect, is if a new contract or purchase has been made, and MAR has not been processed. In this case, the first MAR to process will adjust the price to the new contract price. This price will again remain static until the next MAR is processed. Therefore, it is important that MARS are processed immediately, so that the new price is reflected as soon as possible.

SVS 15 % MARK UP

A 15 % mark up is added to asphalt purchases processed with a MAR. This mark up is the cost to the Maintenance Division to support SVS and system maintenance. This mark up should be considered when estimating material costs, particularly when projecting whether the cost of a project will exceed Major Maintenance dollar limits.

3.04.3 RECEIVING PARTS

Overview

IMMS helps track materials by providing real-time quantities and locations for each material. To maintain real-time data, any changes in Working Stock quantities must be recorded in IMMS Parts for the Maintenance Supervisor's Stock Area.

Receiving from local warehouse

Parts received from the local region or district warehouse are recorded on an LREDP. The warehouse will be responsible for entering LREDP into SVS. The Maintenance Supervisor will do a receipt transaction in IMMS, and enter the correct price for the new Parts in their Stock Area.

Purchases

The region staff will be responsible for entering MARS into SVS for new purchases. The supervisor will do a receipt transaction in IMMS, and enter the correct price for new Parts in their Stock Area.

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3.04.4 ISSUING PARTS

To issue a part to a Work Order, the supervisor must determine which part to issue, check his/her Stock Area for quantity on hand, and determine which Work Order the part will be issued to.

Parts should be charged out daily as they are used.

3.04.5 ADJUSTING PARTS LEVELS

It is important to compare the actual quantity of each material in a Parts location with the quantity recorded in IMMS and adjust the quantities to match. The following rules apply to adjusting Parts levels:

- The current processes for requesting and obtaining approval for purchases remain the same.
- Superintendents adjust Part levels in their supervisors' Stock Areas if there are Part level errors.
- Superintendents will choose Parts to be cycle counted on a monthly basis.
- Supervisors will print a Stock Information Inventory lookup report on a monthly basis for the cycle counting.
- Superintendents and District Landscape Specialists must print and review Adjustment Transactions lookup reports on a monthly basis.
- Each District will designate staff to reconcile SVS reports with IMMS reports, and review purchasing documentation to ensure that quantities issued from the State Warehouse match the quantities received by the supervisor.

3.04.06 TRANSFERRING PARTS

If the Part is in another supervisor's Stock Area, and you have received permission from that supervisor, you may issue the Part from his/her Parts location directly to your Work Order.

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CHAPTER FOUR

MAINTENANCE LEVELS OF SERVICE AND MAINTENANCE TYPE

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4.0 INTRODUCTION

Maintenance Response Standards trigger maintenance (response) for unplanned and planned work activity.

Procedures defined in this section are intended to promote consistent maintenance practices statewide while recognizing the differences in traffic types and volumes, and the differing needs of rural and urban areas.

Following these instructions is a table, which is a guide for supervisors to use to determine the Level of Service for unplanned and planned maintenance work activity.

The table includes two criteria for each work activity. These two criteria are:

LEVELS OF SERVICE

Levels of Service are intended as a decision making tool for Maintenance Supervisors and managers when setting priorities and scheduling work. This information is recorded in the Integrated Maintenance Management System (IMMS) in the **Priority** field, and is required for all Work Orders.

Priority field sample

Priority

MAINTENANCE TYPE

The Maintenance Type is used in an effort to better define Caltrans reasons for work performed, and is used to assist Headquarters Maintenance in determining budget projections and future needs. This information is recorded in IMMS in the **Maintenance Type** field, and is required for all Work Orders.

Maintenance Type field sample

Maint Type

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4.1 LEVELS OF SERVICE – IMMS Priority Code

LEVELS OF SERVICE CATEGORIES

The following categories of Maintenance Response (WHEN) are used in the table to identify the Level of Service for the work activity:

Note: The categories of Responsive maintenance should be used as a **guideline** to determine how quickly to respond to a typical problem. The field supervisor or manager has the authority to vary from the guidelines when, in their professional judgement, it is appropriate to do so.

RESPONSIVE MAINTENANCE

U - Urgent
Q - Quick
R - Routine

SCHEDULED MAINTENANCE

F-XX - Times per Year
F-M - Per Operating Manual
F-S - Per Master Schedule

SPECIAL NEEDS MAINT

S-N - Special Needs
NA - Not applicable
BW - Backlog work

The chart below shows the Maintenance response category and the corresponding IMMS **Priority Code**.

Maintenance Category	Corresponding IMMS Work Order Priority Code	
	Code	Description
U - Urgent	0 IM	IMMEDIATE
Q - Quick	1 1W	WITHIN ONE WEEK
R - Routine	2 1M	WITHIN ONE MONTH
F-XX - Times per year	3 FX	Work is scheduled a certain number of times per year.
F-M - Per Operating Manual	4 FM	PER OPERATING MANUAL
F-S - Per Master Schedule	5 FS	PER MASTER SCHEDULE
SN - Special Needs	6 SN	SPECIAL NEEDS
NA - Not applicable	7 NA	NOT APPLICABLE
BW - Backlog work	8 BW	BACKLOG WORK - TWO MONTHS OR MORE

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RESPONSIVE MAINTENANCE

This type of maintenance includes any work problems that occur unexpectedly, and need to be handled in a prompt or timely manner. The Levels of Service indicate how rapid a response is normally appropriate. The types of **Responsive** maintenance used are described below:

EMERGENCY or URGENT (IMMEDIATE)
--

An immediate response is authorized, including the use of overtime and after hours callback, if necessary. Problems in this group are usually predicated on a request by CHP or other emergency personnel, and are to be corrected as soon as possible. If the problems occur during normal work hours, resources should be diverted immediately and, if necessary, ongoing work should be suspended. When this type of problem develops during non-working hours, it will be addressed by call back, other overtime, or the use of night and/or weekend patrols.

Solutions may be either complete or limited. The effect of a limited solution is to reduce the problem to a lesser state of urgency so it can be totally corrected by ordinary response. Local field supervisors or managers have the responsibility to make this decision.

QUICK (WITHIN ONE WEEK)
--

This work requires early attention and should be undertaken within one (1) week. Some work may require a response within one (1) or two (2) days. Solutions may be either complete or limited. The effect of a limited solution is to reduce the problem to a lesser state of urgency so it can be totally corrected by ordinary response. Local field supervisors or managers have the responsibility to make this decision.

ORDINARY or ROUTINE (WITHIN ONE MONTH)

This work should be underway within one (1) month. When implementing Maintenance operations, work with the highest degree of urgency (i.e., Urgent or Quick) will take precedence over other activities. Routine response maintenance should be treated the same as scheduled maintenance when developing weekly and/or monthly workplans. Normally, these activities should be addressed within a few days and at the most, one (1) month. If the delay will exceed one month, the Area Superintendent or Region Manager should be consulted and arrangements made to complete the work.

WORK WITH SAME DEGREE OF URGENCY

When planning maintenance operations that include several activities having the same degree of urgency (i.e., several items all designated Quick), the work should be undertaken in order of priority.

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NON RESPONSIVE MAINTENANCE

This type of maintenance is not inherently time constrained like Responsive Maintenance. It includes any work problems that occur on a repetitive basis or frequency, or with sufficient advanced warning to allow adequate time to schedule the timing of the work. The Levels of Service tables indicate the suggested work frequencies that are normally appropriate. The types of **Non-Responsive** maintenance and their assigned frequency cycle are:

SCHEDULED MAINTENANCE

This type of maintenance is performed on a scheduled, assigned frequency, or seasonal basis. It can include work that has been delayed or deferred to accumulate a sufficient quantity of work, or allow for workload leveling. Sometimes, this type of work can be deferred or combined with other work activities with no adverse effects on the system or the public. The appropriate schedules should be established at the district or region level. Work of an extraordinary level should be scheduled and concurred with by Headquarters, or established statewide by Headquarters.

The Levels of Service Tables indicate the suggested number of maintenance cycles to be performed each year as follows:

F-XX - Work is normally scheduled a number of times per year, and is not based on a formal master schedule (F-S).
Examples: F-1 = once a year, F-2 = twice a year,
F-52= 52 times a year (weekly).

F-M - Per Operating Manual
(Instruction manual or owner's manual).

F-S - Per Master Schedule
(Normally a schedule created at the district or region level for specific areas/tasks).

SPECIAL NEEDS MAINTENANCE

This type of maintenance may be considered scheduled, but is distinguished from Scheduled Maintenance in that it should only be undertaken when it has been included in an approved Maintenance plan such as Major Maintenance (over \$60,000), or the Bridge Painting Program. Special Needs maintenance work is generally identified at least 18 months in advance of the fiscal year in which it is to be undertaken. Special Needs maintenance work is generally addressed as a specific need in the district Maintenance budget Proposal, and planned well in advance. Headquarters concurrence is usually required for this type of maintenance.

The Levels of Service table indicates Special Needs Maintenance as **S-N**.

OTHER PRIORITY CODES

NOT APPLICABLE

Use Priority Code “Not Applicable” for administrative time including training, meetings, personnel issues, exams, receiving and issuing materials, servicing and repair of equipment, contract administration, and permit review and inspection.

BACKLOG WORK

Use Priority Code “Backlog Work” for any work which is delayed two (2) months or more due to lack of available resources. Once work is completed, the Priority Code should remain as “Backlog”.

LEVELS OF SERVICE TABLE

The Level of Service portion of the tables are divided in to three columns.

- All State Highways
- Highway Class
- Rural / Urban

ALL STATE HIGHWAYS

All highways maintained by Caltrans Maintenance forces, regardless of class road and urban or rural designation.



MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**						PRIORITY WHY CODE
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB		
PROBLEM - Periodic Inspections							
Inspect Electrical Contacts in Pumping Plants, Tunnels and Tubes.	F-1						2

HIGHWAY CLASS

The **State Highway System** routes have been classified as Class 1, 2, and 3 highways based on the type and volume of the traffic they serve.



MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type CODE
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN RUR URB	
PROBLEM - Periodic Inspections				
Supervisor to make brief walk around inspections of all bridges both above and below decks.		F-2 F-4 F-4		1

In the table, the Levels of Service may differ between highway classes.

Definition of Highway Classes:

Class 1 - Rural principle arterials and their urban extensions. (e.g. connecting links).

Class 2 - Not Class 1 or 3.

Class 3 - Low volume local or collector roads, and other logical segments added for continuity.

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RURAL - URBAN

The State Highway System routes have been classified as either Rural or Urban. In the table, the Levels of Service may differ between Urban and Rural highways.



MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type CODE
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
PROBLEM - Periodic Inspections						
Inspect gates, barriers, and other traffic protective devices for manned moveable bridges.	F-365					1

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4.2 MAINTENANCE TYPES

In an effort to better define Caltrans reasons for work performed, and to assist Headquarters Maintenance in determining budget projections and future needs, Maintenance Type codes have been established for use in IMMS.

The “Maintenance Type” column in the Levels of Service table suggests the Maintenance Type Code that should be recorded in IMMS.

The Maintenance Type normally used with the “Task Description” is shown in the last column of the table.

A FAMILY - FLEXIBLE PAVEMENT							↓
MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**						Maintenance Type CODE
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB		
PROBLEM - Periodic Inspections							
Inspection of Pavement Surfaces	F-52						2

The following Maintenance Type Codes will normally be used when a work activity is performed:

- * SAFE - Safety (Code in table = 1)
- * PRES - Preservation of Facility (Code in table = 2)
- * SERV - Service (Code in table = 3)

Work assigned a “1” in the table (safety related) should be completed before doing work in the “2” (preservation), or “3” (service). The Area Superintendent or Region Manager may modify this general statement in unusual circumstances.

The following Maintenance Type codes should only be used for activities that are not directly related to performing a maintenance work activity:

- * SUPP (In support of Activity 100% of time)
- * ADMIN (Administration related)
- * TRNG (Training)
- * MTNG (Meetings)

SUPP (Support) should be used when 100% of the time charged to a Work Order is spent performing tasks that are in support of Maintenance operations such as transporting or servicing equipment, working on snow chains, or equipment preparation.

ADMIN (Administrative) should be used for activities including office work, receiving and issuing materials and supplies, personnel issues, validating or updating highway physical inventory, exams, contract administration, and permit review and inspection.

TRNG (Training) should be used for all training, for the student and the instructor.

MTNG (Meetings) should be used for routine safety or staff meetings.

4.3 TABLES

The Levels of Service tables on the following pages indicate by Family and type of maintenance work, the suggested response or scheduling which would normally be appropriate to satisfy minimum Levels of Service standards (Priority), and Maintenance Type.

Included with each work activity description in the table are IMMS Activity(s) commonly used to perform that type of work. Do not use an Activity without first checking the Activity Instructions included in Volume 2, Part Two, Chapter 12, to insure that you select an Activity that fits the work you are performing, and to insure any applicable special coding requirements that may apply are also recorded on the Work Order.

CONFLICTING INSTRUCTIONS

In the event there are conflicts between the Levels of Service work frequencies contained in this section and those found in Maintenance Manual Volume I, those contained in this section are to be used. We should strive to resolve conflicts, if any. When necessary, Maintenance Supervisors should elevate conflicts to their Area Superintendent or Region Manager and request assistance to determine priorities.

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LEVELS OF SERVICE TABLE

A FAMILY - FLEXIBLE PAVEMENT

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN RUR URB	
Periodic Inspections				
Inspection of pavement surfaces. A1XX01	F-52			2
Crack and Joint Maintenance				
Clean, fill, and seal cracks that are 0.25 inches wide or wider. AXXX20	F-1 or S-N			2
Poor Ride Quality				
Level bridge approaches when irregularity exceeds 1.50 inches per 50 feet. A1XX60	R, Q, F-S, or S-N			2
Structural Pavement Failure				
Repair wheel ruts over 1 inch deep. A1XX50, A1XX60	F-S or S-N			1
Remove and Replace failed base A1XX40	F-S or S-N			2
Repair drip-track ruts over 0.50 inches deep. A1XX50, A1XX60,	F-S or S-N			2
Place grader blanket or spot chip seal when alligator cracking exceeds 30%. A1XX10, A1XX60	F-S or S-N			2
Place seals A1XX10 and A1XX12 through A1XX17	F-S or S-N			2
Potholes / Local Depressions				
Fill potholes A1XX30, A1XX60	U, Q or R			1
Miscellaneous				
Repair edge A1XX30, A1XX40	R, F-S, or S-N			2

CIRCUMSTANCES MAY REQUIRE A RESPONSE AND CODING DIFFERENT THAN OUTLINED IN TABLE.
INCLUDED WITH MOST TASK DESCRIPTIONS IN THE TABLE ARE IMMS ACTIVITIES COMMONLY USED FOR THAT TYPE OF
WORK. DO NOT USE AN ACTIVITY WITHOUT FIRST CHECKING THE ACTIVITY INSTRUCTIONS TO INSURE THE ACTIVITY
FITS THE WORK YOU ARE PERFORMING, AND TO INSURE ANY SPECIAL CODING REQUIREMENTS THAT MAY APPLY ARE
USED.

LEVELS OF SERVICE TABLE

B FAMILY - FLEXIBLE PAVEMENT

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN RUR URB	
Periodic Inspections				
Inspection of pavement surfaces. B1XX01	F-52			2
Crack and Joint Maintenance				
Fill random cracks over 1/8 inches wide. B1XX20	F-1			2
Fill shoulder joints over 1/8 inches wide. B12020	F-1			2
Fill longitudinal joints over 1/8 inches wide. B1XX20	F-1			2
Poor Ride Quality				
Level adjacent slabs if the deviation at the joint exceeds 0.50 inches. B1XX60, B1XX80	F-S or S-N			2
Level slabs by mudjacking when the deviation exceeds 1.50 inches per 50 feet. B1XX80, B1XX90	F-S or S-N			3
Level slabs with asphalt concrete when the deviation exceeds 1.50 inches in 50 feet. B1XX60	Q, R, or S-N			3
Structural Pavement Failure				
Repair transverse spalls exceeding 4 inches. B1XX30, B1XX40	F-S or S-N			2
Repair longitudinal spalls. B1XX30, B1XX40	U or Q			2
Repair localized slab failures. B1XX40, B1XX60, B1XX70	R, F-S or S-N			2
Base reinforcement – Subsealing B1XX90	F-S or S-N			2
Bridge Approaches and Departures				
Correct bridge approach and departure slabs with a ride score exceeding 17. B1XX40, B1XX50, B1XX60, B1XX70, B1XX80	R, F-S or S-N			2
Paved Shoulder Preventive Maintenance				
Apply seal coats/rejuvenator, with or without cover coat. Per recommendations from PMS System. B12010	F-S or S-N			2
Paved Shoulder Repairs				
Digout and replace base and/or surface material. B12040	R, F-S or S-N			2

LEVELS OF SERVICE TABLE

B FAMILY - FLEXIBLE PAVEMENT (Continued)

Seal Cracks B12020	F-1 or S-N			2
Level shoulder joints if the offset between the pavement and shoulder exceeds 0.75 inches. B12040, B12050	R, F-S or S-N			1

CIRCUMSTANCES MAY REQUIRE A RESPONSE AND CODING DIFFERENT THAN OUTLINED IN TABLE.
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WORK. DO NOT USE AN ACTIVITY WITHOUT FIRST CHECKING THE ACTIVITY INSTRUCTIONS TO INSURE THE ACTIVITY
FITS THE WORK YOU ARE PERFORMING, AND TO INSURE ANY SPECIAL CODING REQUIREMENTS THAT MAY APPLY ARE
USED.

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LEVELS OF SERVICE TABLE

C FAMILY - SLOPES, DRAINAGE AND VEGETATION

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN RUR URB	
Periodic Inspections				
Inspect shoulders and other areas within the clear recovery zone for excessive drop-off, ruts or erosion. C20001	F-52			1
Inspect for vegetation impairing visibility. C2XX01, C30001	F-52			1
Inspect fences for damage and/or breaks. C40001	F-52			1
Inspect ditches and channels for shape and serviceability. C50001	F-2 (and after each storm)			2
Inspect culverts, drains and inlets for serviceability. C60001, C61001, C64001, C71001, C70001	F-2 (and after each storm)			2
Inspect all drains, underdrains and pipes. C70001, C60001, C61001, C62001, C63001, C64001	F-1			2
Inspect dikes and berms. C51001	F-1			2
Unpaved Shoulder Management				
Correct vertical drop-offs and/or depressions adjacent to the pavement, and ruts or erosion in areas used by traffic in emergencies. C12XXX	R			1 or 3
Non-Landscape Weed Control				
Control weeds determined to be noxious by the County Agriculture Commissioner. C200XX	Q			2
Control weeds undesirable in a specific environment. C200XX	F-S (per Dist Landscape Spec.)			3
Remove or prevent weeds from impairing signs, safety devices, guardrails or sight distances. C200XX	F-1 (as needed)			1
Control weeds to prevent hazardous fire conditions. C200XX	F-1			1

CIRCUMSTANCES MAY REQUIRE A RESPONSE AND CODING DIFFERENT THAN OUTLINED IN TABLE. INCLUDED WITH MOST TASK DESCRIPTIONS IN THE TABLE ARE IMMS ACTIVITIES COMMONLY USED FOR THAT TYPE OF WORK. DO NOT USE AN ACTIVITY WITHOUT FIRST CHECKING THE ACTIVITY INSTRUCTIONS TO INSURE THE ACTIVITY FITS THE WORK YOU ARE PERFORMING, AND TO INSURE ANY SPECIAL CODING REQUIREMENTS THAT MAY APPLY ARE USED.

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LEVELS OF SERVICE TABLE

C FAMILY - SLOPES, DRAINAGE AND VEGETATION (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN RUR URB	
Non-Landscape Tree and Brush Control				
Clean-up down vegetation on the travelway. C300XX	U			1
Prune or remove brush and/or trees restricting visibility. C300XX	Q			1
Maintain native plants and ground cover for erosion control. C300XX, C200XX	F-S (Per Dist L/S Spec.)			2
Remove, prune or spray to control plants encroaching in non-hazardous situations. C200XX, C300XX	F-S (Per Dist L/S Spec.) or U			1 or 3
Clean-up down vegetation not on travelway. C300XX	F-S (Per Dist L/S Spec.)			3
Fence Repair (Repair / Replace or Day Labor)				
Repair or replace damaged and/or broken fences that no longer provide access control and/or a physical barrier on freeway type facilities. C400XX, C40020, C40030	U			1
Notify adjacent property owners of needed fence repair. C40001, C400XX	Q			1
Replace deteriorated state owned fences. C400XX	R			2
Drainage Obstructions - Ditches and Channels				
Eliminate obstructions, clean and reshape ditches and channels. C50050	F-1or U			1 or 2
Repair earthen berms. C51010, C51020, C51030	F-1 or U			1 or 2
Seal AC dikes, gutters, earthen berms, etc. C51070	F-1			2
Drainage Obstructions – Overside Drains and Culverts				
Clean obstructed culverts, drains, and inlets. C60050, C61050, C62050, C64050	F-1 or U			1 or 2
Drainage Obstructions - Subsurface Drains				
Clean subsurface drains. C63050, C70050, C71050	R (and after storms)			2

CIRCUMSTANCES MAY REQUIRE A RESPONSE AND CODING DIFFERENT THAN OUTLINED IN TABLE.
INCLUDED WITH MOST TASK DESCRIPTIONS IN THE TABLE ARE IMMS ACTIVITIES COMMONLY USED FOR THAT TYPE OF
WORK. DO NOT USE AN ACTIVITY WITHOUT FIRST CHECKING THE ACTIVITY INSTRUCTIONS TO INSURE THE ACTIVITY
FITS THE WORK YOU ARE PERFORMING, AND TO INSURE ANY SPECIAL CODING REQUIREMENTS THAT MAY APPLY ARE
USED.

LEVELS OF SERVICE TABLE

C FAMILY - SLOPES, DRAINAGE AND VEGETATION -(Continued)

Worn-out or Damaged Drainage Facilities (Repair / Replace, or Day Labor)				
As needed or planned repair or replacement of damaged facilities. C50010, C50020, C50050, C51010, C51020, C51030, C60010, C60020, C60030, C61010, C61020, C61030, C62010, C62020, C62030, C63010, C63020, C63030, C64010, C64020, C64030, C70010, C70020, C70030, C71010, C71020, C71030	R			2
PROBLEM 9 - Miscellaneous				
Clean/pump dry wells C95050	F-1			2

CIRCUMSTANCES MAY REQUIRE A RESPONSE AND CODING DIFFERENT THAN OUTLINED IN TABLE.
 INCLUDED WITH MOST TASK DESCRIPTIONS IN THE TABLE ARE IMMS ACTIVITIES COMMONLY USED FOR THAT TYPE OF WORK. DO NOT USE AN ACTIVITY WITHOUT FIRST CHECKING THE ACTIVITY INSTRUCTIONS TO INSURE THE ACTIVITY FITS THE WORK YOU ARE PERFORMING, AND TO INSURE ANY SPECIAL CODING REQUIREMENTS THAT MAY APPLY ARE USED.

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LEVELS OF SERVICE TABLE

D FAMILY - LITTER AND DEBRIS

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN RUR URB	
Inspection for litter along roadside or in L/S areas and graffiti on surfaces. D20001	F-52			3
Debris and Carcass Pick-up				
Remove objects or material on traveled way disrupting traffic flow. D20000	U			1
Remove debris and carcasses not on traveled way. D20000	Q			3
Freeway Patrol				
Scheduled patrols for litter and debris (Allowed by exception only). D20000	R			1
Sweeping				
Sweeping for litter and debris. D30000	F-S (Frequency established by district on Sweeping Frequency map).			3
Litter Pick-up				
Litter pick-up along roadside or in L/S areas by hand or machine. D40100	F-S (Frequency established by district on Sweeping Frequency map).			3
Adopt-A-Highway Litter Removal D40101	F-S (Frequency established by district on Sweeping Frequency map).			3
Adopt-A-Highway Safety Orientation D40102	F-S (As requested by District AAH Coordinator)			4
Adopt-A-Highway Administration D40103	F-S (As requested by District AAH Coordinator)			4
Homeless debris removal D40104	U or R			1 or 3
Spills				
Identifying unknown materials on the R/W, and removing spilled material (both toxic and non-toxic). D50000	U, Q, or R			1 or 3
Graffiti				
Remove obscene graffiti from visible surfaces. D60000	U			3
Remove obscene signs D90000	U			3
Remove non-obscene signs D90000	Q			3
Remove non-obscene graffiti from visible surfaces. D60000	Q			3

CIRCUMSTANCES MAY REQUIRE A RESPONSE AND CODING DIFFERENT THAN OUTLINED IN TABLE. INCLUDED WITH MOST TASK DESCRIPTIONS IN THE TABLE ARE IMMS ACTIVITIES COMMONLY USED FOR THAT TYPE OF WORK. DO NOT USE AN ACTIVITY WITHOUT FIRST CHECKING THE ACTIVITY INSTRUCTIONS TO INSURE THE ACTIVITY FITS THE WORK YOU ARE PERFORMING, AND TO INSURE ANY SPECIAL CODING REQUIREMENTS THAT MAY APPLY ARE USED.

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LEVELS OF SERVICE TABLE

E FAMILY - LANDSCAPING

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**						Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB		
Inspections							
Inspect planted areas to determine if weed, disease, rodent or insect control is needed. E10001	F-52						2
Monitor irrigation systems operation and inspect plant materials to assure that their water needs are being properly met. E10001	F-52						2
Inspect growth of ground cover for conditions leading to encroachment E10001	F-12						2
Inspect growth of shrubs and trees for conditions leading to encroachment or overcrowding. E10001	F-4						2
Inspect irrigation systems in depth during low irrigation season to insure uninterrupted service during peak season. E10001	F-1						2
Weed and Turf Control							
Control weeds with contact chemicals if needed. E10012	F-4						2
Fertilize turf areas	F-3						2
Control weeds with short term residual pre-emergents if needed. E20050	F-2						2
Mow all weeds in unplanted (native) landscaped areas E10010	F-2						3
Control weeds with longer residual pre-emergents if needed. E10012	F-1						2

CIRCUMSTANCES MAY REQUIRE A RESPONSE AND CODING DIFFERENT THAN OUTLINED IN TABLE. INCLUDED WITH MOST TASK DESCRIPTIONS IN THE TABLE ARE IMMS ACTIVITIES COMMONLY USED FOR THAT TYPE OF WORK. DO NOT USE AN ACTIVITY WITHOUT FIRST CHECKING THE ACTIVITY INSTRUCTIONS TO INSURE THE ACTIVITY FITS THE WORK YOU ARE PERFORMING, AND TO INSURE ANY SPECIAL CODING REQUIREMENTS THAT MAY APPLY ARE USED.

July 2005

LEVELS OF SERVICE TABLE

E FAMILY - LANDSCAPING (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN RUR URB	
Pruning, Thinning, Removing or Replacing L/S Plantings				
Prune or remove shrubs and/or trees causing a hazardous condition E20030, E20031, E20040	U			1
Prune or remove shrubs and/or trees causing a potentially hazardous condition. E20030, E20031, E20040	Q			1
Prune or remove shrubs and/or trees causing impaired visibility. E20030, E20031, E20040	Q			1
Control growth of ground cover to correct encroachment. E20041, E20042	R			2
Control disease, pests and insects in ground cover, trees and shrubs. E10012, E10013,	R			2
Control rodents in ground cover, trees and shrubs. E10015	R			2
Replace or replant plants for damage claims. E20020, E20021	R			2
Clean-up downed vegetation that is not a safety problem after a storm (except litter). E20030, E20031, E20040, E20041	R			3
Fertilize trees and shrubs. E20050	R – (As needed to maintain the plants in a vigorous and healthy condition).			2
Control growth of shrubs and trees to correct encroachment. E20040, E10012	F-S (Per Dist Landscape Spec.)			2
Remove shrubs and/or trees to correct crowding or encroachment. E20030, E20031, E20040	F-S (Per Dist Landscape Spec.)			2
Replace or replant plants for other reasons. E20020, E20021, E20022	F-S (Per Dist Landscape Spec.)			2
Fertilize ground cover areas. E20050	R – (As needed to maintain the plants in a vigorous and healthy condition).			2
Mulching trees, shrubs and ground cover. E20070	F-1			2

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April 2007

LEVELS OF SERVICE TABLE

F FAMILY - STORMWATER

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**					Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Training & Stormwater Management Support							
F10003	Tailgate meetings (BMP)	F-S				TRNG	
F10004	General meetings (MGMT/SUPPRT)	NA				MTNG	
F10006	Employee Orientation/Training	NA				TRNG	
F10007	Specialized Training (BMP'S)	NA				TRNG	
Drains & Drainage (Caltrans doing work)							
F20001	Inspection drain inlet	NA				1	
F20005	Drain stenciling	NA				1 or 3	
F20050	Drain cleaning	NA				1 or 2	
F20051	Sweep highway segment with F2 drains	NA				3	
Inspection & Monitoring							
F30001	Facility inspection stormwater	NA				ADMN	
F30003	Oversight/inspect maint activities	NA				ADMN	
F30010	Repair/replace corrective measure	NA				3	
Erosion Control & Waste Spoils Management							
F40001	Inspect soil stab/erosion cont	NA				3	
F40010	Repair/replace soil stab,sed control, RSP	NA				3	
F40020	Install soil stab,sed control, RSP	NA				3	
F40101	Inspect/monitor stockpiles	NA				3	
F40110	Perimeter control stockpiles	NA				3	
F40130	Dispose of stockpiles	NA				3	
F40210	Snow haul	NA				3	
NPDES Permit Requirements							
F50003	Evaluate/develop de-icing criteria	NA				ADMN	
F50005	Vegetation Management, chemical use planning .	NA				ADMN	
F50006	NPDES Permit related activity	NA				ADMN	
F50007	Best Management Practices Implementation.	NA				SUPP	
Illicit Connections & Illegal Discharges							
F60002	Investigation and reporting of IC/ID	NA				1	
F60030	Remove connection/oversight of removal.	NA				1	
F60050	Cleanup of illegal discharge	NA				1	

April 2007

LEVELS OF SERVICE TABLE

F FAMILY - STORMWATER (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**					Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Water Quality for Structural Treatments							
F70001	Inspect stormwater structural BMP	NA				3	
F70010	Repair/replace/maintain Structural BMP	NA				3	
F70011	Repair/replace/maintain/clean sand trap	NA				3	
F70050	Clean Stormwater Structural BMP	NA				3	
Management & Oversight of Contracted Projects							
F80001	Oversight of Construction contract	NA				ADMN	
F80101	Oversight drain inspection contract	NA				ADMN	
F80201	Oversight drain cleaning contract	NA				ADMN	
F80301	Oversight of sample collection & testing contract	NA				ADMN	
Denitrification Facility							
F90001	Inspection of Denitrification Facility	NA				ADMN	
F90006	Denitrification Facility NPDES permit activities	NA				ADMN	
F90010	Denitrification Facility Repairs	NA				3	
F90011	Denitrification Facility O&M	NA				3	

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July 2005

LEVELS OF SERVICE TABLE

G FAMILY - PUBLIC FACILITIES

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Periodic Inspections						
Inspect facilities being maintained under contract G10001	R				2	
Roadside Rests, Scheduled Standard Maintenance						
Cleaning floors, toilets, and urinals. G10050	F-S				1	
Fill soap dispensers, mow lawns, empty trash cans, clean mirrors, clean picnic tables, pickup litter, and remove graffiti. G10012, G10050	F-S				3	
Roadside Rests, Non-Standard Maintenance						
Replace/repair sprinkler heads, plumbing, sump pumps. G10010, G10013	Q				2	
Repair/replace electrical systems, lighting, etc. G10011	U				1 or 2	
Repair/paint fences, picnic tables, benches, and buildings. G10010, G10012	R				2	
Prune, remove, or replace trees, ground cover, or shrubs G10012	R				2	
Maintain and repair water treatment systems, including servicing and refilling chemicals. G10013	Q				1 or 2	
Vista Points, Park and Ride Lots						
Maintain plants, irrigation systems, buildings, or control weeds, etc. G20010, G20012, G40010, G40011, G40012	R				2	
Sweep parking area, sidewalks, pickup litter, and empty trash cans. G20012, G40012	F-S				3	
Repair fences, railings, picnic tables, benches, etc. G20012, G21010	R				2	

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G FAMILY - PUBLIC FACILITIES (Continued)

Weigh Stations/Weigh-in-Motion Installations				
Sweep grounds G30012	F-S			3
Paint building; replace windows, locks, etc.; repair fences, guardrail, pavement, toilets, drinking fountains, etc. G30010	R			2

LEVELS OF SERVICE TABLE

H FAMILY - STRUCTURES

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**				Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN RUR URB		
Substructure						
H10001	Perform routine inspection of bridge substructure elements.	F-2			2	
H10002	Perform an inspection on a substructure element when a complaint has been received.	U			1	
H10010	Repair of spalls in substructure elements.	Q			2	
H10011	Replacement of substructure elements.	R			2	
H10012	Repair substructure elements	R			2	
H10013	Inject epoxy into cracks on concrete substructure elements.	R			2	
H10021	Install a graffiti deterrent system on bridge substructure elements.	Q			3	
H10040	Install or repair navigation protection on substructure elements.	U			1	
H10050	Clear or remove any debris that may be caught on a bridge substructure element or obstructing the channel flow.	R			2	
H10060	Protect steel substructure elements by applying protective paint.	F-S			2	
H10070	Deter birds from nesting on bridge substructure elements.	F-S			2	
H10090	Miscellaneous bridge substructure activities.	F-S			2	
	Remove graffiti (Non obscene)	R			2	
	Remove graffiti (Obscene)	U			2	

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LEVELS OF SERVICE TABLE

H FAMILY - STRUCTURES (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**					Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Superstructure							
H20001	Perform routine inspections on bridge superstructure elements.	F-2					2
H20002	Perform an inspection on a bridge superstructure element when a complaint has been received.	U					1
H20010	Repair concrete spalls on bridge superstructure elements.	F-S					2
H20011	Replace a portion, or all of a bridge superstructure element.	Q					2
H20012	Repair or rehabilitate all or a portion of bridge superstructure elements.	R					2
H20013	Inject epoxy into cracks on concrete bridge superstructure elements.	R					2
H20070	Replacement mechanical and electrical traffic gates that cannot be repaired.	U					1
H20090	Miscellaneous maintenance or repair of bridge superstructure elements.	Q					2

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LEVELS OF SERVICE TABLE

H FAMILY - STRUCTURES (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**					Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Deck							
H30001	Perform a routine inspection on a bridge deck.	F-2					2
H30002	Perform an inspection on a bridge deck when a complaint has been received.	U					1
H30011	Perform a complete or partial replacement of a bridge deck.	F-S					2
H30012	Perform a partial depth deck rehabilitation on a portion or all of a bridge deck.	F-S					2
H30013	Resurface a portion or all of a bridge deck with either asphalt concrete or polyester concrete.	F-S					2
H30020	Patch spalls in a bridge deck, up to 75 mm in depth.	R					2
H30030	Patch potholes in a bridge deck, up to 150 mm in depth.	U					1
H30050	Treat a concrete bridge deck with Methacrylate.	F-S					2
H30060	Repair or rehabilitate a bridge deck by placing an overlay on a bridge deck.	F-S					2
H30070	Protect steel deck elements with paint applications.	F-S					2
H30090	Miscellaneous maintenance or repair of a bridge decks.	U					1
Approach Slab							
H31001	Perform routine inspection of bridge approach slabs.	F-2					2
H31002	Perform an inspection of bridge approach slabs after a complaint has been received.	U					1
H31011	Perform a complete or partial replacement of a bridge approach slab.	F-S					2
H31060	Repair or rehabilitate a bridge approach slab by placing an overlay on the approach slab.	F-S					2
H31080	Level an approach slab that has settled.	Q					1

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LEVELS OF SERVICE TABLE

H FAMILY - STRUCTURES (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**				Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN RUR URB		
Bridge Joints						
H40001	Perform routine inspection of bridge deck joints and joint seals.	F-2				2
H40002	Perform an inspection of bridge deck joints and joint seals when a complaint has been received.	U				1
H40010	Repair portions of damaged or deteriorated bridge deck joints or bridge joint seals.	R				2
H40011	Replace damaged or deteriorated bridge deck joints or joint seals.	F-S				2
H40012	Rehabilitate existing bridge deck joints or joint seals.	F-S				2
Bridge Bearings						
H41001	Perform routine inspection of bridge bearings.	F2				2
H41002	Perform an investigation of the bridge bearings when a complaint has been received.	U				1
H41011	Replace damaged or deteriorated bearings.	Q				2
H41012	Rehabilitate damaged or deteriorated bearings.	F-S				2
H41013	Reset existing bridge bearings that have been altered due to excessive bridge movement.	Q				2
H41050	Clean the dirt and debris from bridge bearings and surrounding area.	R				2

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LEVELS OF SERVICE TABLE

H FAMILY - STRUCTURES (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**					Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Bridge Railing							
H50001	Perform routine inspection of bridge railing elements.	F-2					2
H50002	Perform an inspection of bridge railing elements when a complaint has been received.	U					1
H50010	Repair damaged or deteriorated bridge rail.	U					1
H50011	Replace existing deteriorated, damaged or inadequate bridge rail with new bridge rail.	U					1
H50012	Rehabilitate portions or all of existing bridge rail due to damage, deterioration or inadequacies.	F-S					1
H50060	Protect steel bridge rail elements by applying protective coats of paint.	F-S					2
Bridge Drainage							
H60001	Perform routine inspection of bridge drainage elements.	R					1
H60002	Perform inspection of bridge drainage elements when a complaint has been received.	U					1
H60050	Clean the pan, gutter and drainage system to insure proper drainage of bridge deck.	F-S					1

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LEVELS OF SERVICE TABLE

H FAMILY - STRUCTURES (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**				Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3			
Bridge Railing						
H70061	Perform localized steel cleaning and localized protective paint coating damage repairs on steel bridges.	F-S				2
H70062	Perform localized steel cleaning and full protective paint coating to entire structure.	F-S				2
H70063	Perform steel cleaning and protective paint coating damage repairs on entire structure.	F-S				2
H70069	Miscellaneous bridge painting.	Q				2
Bridge Mechanical Electrical						
H80001	Investigation of mechanical and electrical equipment at manned movable bridges.	F-365				1
	Investigation of mechanical and electrical equipment at unmanned movable bridges over shipping channels.	F-52				1
	Investigation of mechanical and electrical equipment at unmanned movable bridges.	F-12				1
	Inspect gates, barriers, and other traffic protective devices for manned moveable bridges.	F-365				1
	Inspect gates, barriers, and other traffic protective devices for unmanned moveable bridges.	F-12				1
H80002	Investigation of mechanical and electrical equipment at movable bridges when a complaint has been received.	U				1
H80010	Repair existing mechanical and electrical equipment.	Q				2
H80011	Replace existing mechanical and electrical equipment.	F-S				2
Bridge Railing						
H80012	Rehabilitate existing mechanical and electrical equipment.	F-S				2
H80090	Miscellaneous maintenance and repairs of mechanical and electrical systems.	Q				2

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LEVELS OF SERVICE TABLE

H FAMILY - STRUCTURES (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**					Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Bridge Replace							
H90011	Any activity relating to the replacement of a bridge.	U					1
Bridge Seismic Retrofit							
H91010	Routine maintenance on bridge seismic elements.	F-S					2
H91040	Installation or updating bridge seismic retrofit elements.	F-S					1
Bridge Drawbridge Operation & Maintenance							
H92080	Operations and maintenance, which are required for the overall performance of the movable bridge.	F-1					1

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LEVELS OF SERVICE TABLE

J FAMILY - OTHER STRUCTURES

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**					Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Pump Plant Activities							
J10001	Routine inspection	F-1					2
	Inspect and replace pumphouse lights and electrical control indicator lights.	R					2
J10002	Perform an inspection on a pump plant when a complaint has been received.	U					1
J10003	Confined space air quality testing.	R					1
J10004	Scheduled preventative maintenance inspections of mechanical and electrical equipment.	F-S					2
J10005	General maintenance of pumping plants.	F-S					2
	Maintain proper oil level in lubricators	U					2
	Inspect electrodes in pumping plants.	F-2					2
	Adjust pump packing glands to eliminate excessive leakage.	R					2
	Grease pump bearings per pump plant maintenance manual.	F-M					2
	Paint corroded pump plant equipment.	F-S					2
J10009	Contacting underground service alert prior to any excavation operation.	R					1
J10010	Repair or replace damaged or inadequate equipment pertaining to pumping plant operations.	U					1
J10040	Modify existing mechanical equipment, electrical controls or structural components within the pumping plant to assure proper operating condition.	Q					2
J10050	Clean pump plant to assure free flow of water to and from the pumping equipment.	F-1					2
	Inspect proper screening on all surface drainage inlets.	F-2					

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LEVELS OF SERVICE TABLE

J FAMILY - OTHER STRUCTURES (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**					Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Tunnels & Tubes							
J20001	Perform inspection of mechanical and electrical equipment at all roadway tunnels and tubes.	F-1					2
	Inspect and service traffic control systems.	F-52					1
	Inspect service and test all alarms, communication and other safety systems.	F-12					1
J20002	Perform inspection and make necessary repairs of mechanical and electrical equipment at all roadway tunnels and tubes when a complaint has been received.	U					1
J20003	Confined space air quality testing.	R					1
J20004	Inspection, servicing, and testing of the various fire extinguishers in tunnels and tubes.	F-12					1
J20005	Inspection, servicing, and testing of the various controls and radio equipment required for tunnel and tube operation.	F-12					2
J20009	Contacting Underground Service Alert prior to any excavation operation.	R					1

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July 2005

LEVELS OF SERVICE TABLE

J FAMILY - OTHER STRUCTURES (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**					Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
J20010	Repair or replace damaged or inadequate equipment pertaining to tunnels, tubes.	U					1
J20012	General maintenance, scheduled preventative maintenance, and monitoring and testing required for the various electrical motors in tunnels and tubes.	F-12					2
J20041	General maintenance, scheduled preventative maintenance, and monitoring and testing required for the various fresh air blowers and jet fans in tunnels and tubes.	F-12					2
J20042	General maintenance, scheduled preventative maintenance, and monitoring and testing required for the various exhaust air exhausters and fans in tunnels and tubes.	F-12					2
J20043	General maintenance, scheduled preventative maintenance, and monitoring and testing required for the various mechanical barrier fences, movable barriers, and pop-up traffic control devices in the barrier pits at tunnels and tubes.	F-12					2
J20044	General maintenance, scheduled preventative maintenance, and monitoring and testing required for the various air compressors in tunnels and tubes.	F-12					2
J20045	General maintenance, scheduled preventative maintenance, and monitoring and testing required for the various zero and span NO and CO analyzers and related sensors in tunnels and tubes.	F-12					2

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July 2005

LEVELS OF SERVICE TABLE

J FAMILY - OTHER STRUCTURES (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION		** LEVELS OF SERVICE**					Maintenance Type
		ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
J20046	General maintenance, scheduled preventative maintenance, and monitoring and testing required for the cooling systems for the emergency stand-by power generators in tunnels and tubes.	F-12					2
J20047	General maintenance, scheduled preventative maintenance, and monitoring and testing required for the emergency stand-by power diesel generators in tunnels and tubes.	F-12					2
J20050	General tunnel lining maintenance, traffic control, tunnel lining washing, and drainage and wash water collection in tunnels and tubes.	F-12					2
J20051	General tunnel drainline and drainage inlet maintenance in tunnels and tubes.	F-2					1
J20060	This activity includes the relamping, general tunnel lighting maintenance, lighting controls and wiring, traffic control, tunnel lighting washing, and drainage and wash water collection in tunnels and tubes.	F-52					1
Ferryboats							
J30001	Routine inspections of all ferryboats and ferryboat facilities.	F-1/2					2
	Annual Coast Guard inspection.	F-1					2
	5 Year Coast Guard inspection requiring dry docking ferryboat.	F-1/5					2
J30002	Routine inspections of all ferryboats and ferryboat facilities when a complaint has been received.	U					1
J30010	Maintenance and repairs to existing structural, mechanical and electrical equipment.	F-M					2
J30080	Actual operation of the ferryboats by the operators and deckhands.	R					1
Miscellaneous							
Repair Fire Protection Systems. (Next day if easible).		Q					1
Repair Carbon Monoxide Gas Analyzers. (Next day if feasible).		Q					1
Repair TV equipment. (Next day if feasible).		Q					1

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LEVELS OF SERVICE TABLE

K FAMILY - ELECTRICAL

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**				Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3		RURAL URBAN RUR URB	
Highway Lighting Assets and Equipment					
Inspection of Construction, Permit, or other projects. K10001	R				2
Night inspection of highway lighting assets. K10003	F-12				2
Updating of Highway Lighting physical inventory. K10004	R – (Continuous)				3
Response to reports of malfunctions including outages, property damage, vandalism, false alarms, and problems related to power company outages. K10010	Q				1
Temporary repair of accident damage, knocked down light standards, service cabinets, or other highway lighting equipment. K10011	U				1
Permanent repairs of accident damage, knocked down light standards, service cabinets, or other highway lighting equipment. K10011	Q				1
Perform Day Labor work. K10020	R				1
Group relamp and clean luminaires. K10070	F-1/12 F-1/4 F-1/4 F-1/3 F-1/2	Fluorescent (Inductive) Mercury High Pressure Sodium Low Pressure Sodium Fluorescent (Tube)			2
Bench repairs of highway lighting equipment. K10010	R				1

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LEVELS OF SERVICE TABLE

K FAMILY – ELECTRICAL (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN RUR URB			
Sign Lighting Assets and Equipment						
Inspection of Construction, Permit, or other projects. K20001	R				2	
Night inspection of sign lighting assets. K20003	F-12				2	
Updating of sign lighting physical inventory. K20004	R – (Continuous)				3	
Response to reports of malfunctions including outages, property damage, vandalism, false alarms, and problems related to power company outages. K20010	Q				1	
Temporary repair of accident damage, knocked down standards, service cabinets, or other sign lighting equipment. K20011	Q				1	
Permanent repairs of accident damage, knocked down standards, service cabinets, or other sign lighting equipment. K20011	R				1	
Perform Day Labor work. K20020	R				1	
Group relamp and clean sign lighting fixtures. K20070	F-1/12 F-1/4 F-1/2	Fluorescent (Inductive) Mercury Fluorescent (Tube)			2	
Bench repairs of sign lighting equipment. K20010	R				1	

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LEVELS OF SERVICE TABLE

K FAMILY - ELECTRICAL (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Traffic Signal Assets and Equipment						
Inspection of Construction, Permit, or other projects. K40001	R				2	
Updating of traffic signal physical inventory. K40004	R – (Continuous)				3	
Perform preventative maintenance (PM) checks. K40005	F-4				2	
Perform annual conflict monitor checks. K40006	F-1				2	
Response to reports of malfunctions including outages, property damage, vandalism, false alarms, and problems related to power company outages. K40010	U				1	
Temporary repair of accident damage, knocked down standards, service cabinets, or other Traffic Signal equipment. K40011	U				1	
Permanent repairs of accident damage, knocked down light standards, service cabinets, or other traffic signal equipment. K40011	Q				1	
Perform Day Labor work. K40020	R				1	
Group relamp and clean signal fixtures. K40070	F-1/5 F-1/10 F-1/10 F-1/10	LED (Red) LED (Yellow) LED (Green) LED (Pedestrian)			2	
Bench repairs of traffic signal equipment. K40010	R				1	

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LEVELS OF SERVICE TABLE

K FAMILY – ELECTRICAL (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Flashing Beacon Assets and Equipment						
Inspection of Construction, Permit, or other projects. K50001	R					2
Updating of flashing beacon physical inventory. K50004	R – (Continuous)					3
Perform preventative maintenance (PM) checks. K50005	F-3					2
Response to reports of malfunctions including outages, property damage, vandalism, false alarms, and problems related to power company outages. K50010	U					1
Temporary repair of accident damage, knocked down standards, service cabinets, or other traffic signal equipment. K50011	U					1
Permanent repairs of accident damage, knocked down light standards, service cabinets, or other traffic signal equipment. K50011	Q					1
Perform Day Labor work. K50020	R					1
Group relamp and clean signal fixtures. K50070	F-1/0 F-1/10	LED (Red) LED (Yellow)				2
Bench repairs of flashing beacon equipment. K50010	R					1

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LEVELS OF SERVICE TABLE

K FAMILY – ELECTRICAL (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Ramp Meter Assets and equipment						
Inspection of Construction, Permit, or other projects. K60001	R					2
Updating of ramp meter physical inventory. K60004	R – (Continuous)					3
Perform preventative maintenance (PM) checks. K60005	F-3					2
Response to reports of malfunctions including outages, property damage, vandalism, false alarms, and problems related to power company outages. K60010	Q					1
Temporary repair of accident damage, knocked down standards, service cabinets, or other traffic signal equipment. K60011	U					1
Permanent repairs of accident damage, knocked down light standards, service cabinets, or other traffic signal equipment. K60011	R					1
Perform Day Labor work. K60020	R					1
Group relamp and clean signal fixtures. K60070	F-1/15 F-1/15 F-1/15 F-1/15 F-1	LED (Red) LED (Yellow) LED (Green) Meter On (LED) Meter ON (Incandescent)				2
Bench repairs of ramp meter equipment. K60010	R					1

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LEVELS OF SERVICE TABLE

K FAMILY – ELECTRICAL (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Traffic Management Systems						
Inspection of Construction, Permit, or other projects. K70001	R					2
Updating of Traffic Management System physical inventory. K70004	R – (Continuous)					3
Perform preventative maintenance (PM) checks. K70005 Changeable Message Signs – CMS Closed Circuit Television – CCTV Wrong Way Detection System Vehicle Detection System – VDS Fiber Optic System Highway Advisory Radio – HAR Communication Hub Weather Station	F-3 F-2 F-4 F-3 F-3 F-3 F-3					2
Response to reports of malfunctions including outages, property damage, vandalism, false alarms, and problems related to power company outages. K70010	Q					1
Temporary repair of accident damage, knocked down standards, service cabinets, or other traffic signal equipment. K70011	U					1
Permanent repairs of accident damage, knocked down light standards, service cabinets, or other traffic signal equipment. K70011	R					1
Perform Day Labor work. K70020	R					1
Bench repairs of Traffic Management equipment. K70010	R					1

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LEVELS OF SERVICE TABLE

K FAMILY – ELECTRICAL (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN RUR URB	
Traffic Census / Speed Monitor Stations				
Inspection of Construction, Permit, or other projects. K80001	R			2
Updating of Census Station physical inventory. K80004	R – (Continuous)			3
Perform preventative maintenance (PM) checks. K80005	R – (As needed. No set cycle).			2
Response to reports of malfunctions including outages, property damage, vandalism, false alarms, and problems related to power company outages. K80010	R			1
Temporary repair of accident damage, knocked down standards, service cabinets, or other traffic signal equipment. K80011	Q			1
Permanent repairs of accident damage, knocked down light standards, service cabinets, or other traffic signal equipment. K80011	R			1
Perform Day Labor work. K80020	R			1
Bench repairs of Census Station equipment. K80010	R			1
Miscellaneous				
Locate facilities K90008	R			2
Test new equipment K90100	R			3
Calibrate test equipment K90110	R			3

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LEVELS OF SERVICE TABLE

M FAMILY - TRAFFIC GUIDANCE

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Pavement Striping						
Formal annual night inspection M10003	F-1					
Place temporary pavement delineation at locations where maintenance activities have obliterated permanent delineation. (Before the end of shift). M10010	U				1	
Replace permanent delineation at locations where maintenance activities have obliterated existing delineation. (Complete within 2 weeks, if possible). M10010	R				1	
Replacement of painted or plastic center or lane lines (Snow area only). M10010		R, F-S, F-S			1	
Replacement of painted or plastic center or lane lines (Non-snow areas). M10010	F-S				1	
Replacement of painted or plastic edge lines. (All areas). M10010	F-S				1	
Place or remove delineation at the request of Traffic or other Caltrans unit. (Normally Day labor). M10020	F-S				3	

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LEVELS OF SERVICE TABLE

M FAMILY – TRAFFIC GUIDANCE (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Pavement Markings.						
Formal annual night inspection M20003	F-1					
Replace permanent markings at locations where maintenance activities have obliterated existing delineation. (Complete within 2 weeks, if possible.) M20010	R				1	
Repair or remove plastic pavement markings. (Includes cleaning) M20010	F-S				2	
Replacement of painted or plastic pavement markings. (All areas). M20010	F-S				1	
Place or remove delineation at the request of the Traffic of other Caltrans Department. (Normally Day Labor). M20020	F-S				3	
Raised / Recessed Pavement Markings.						
Formal annual night inspection. M30003	F-1					
Placement of any type of raised/recessed markers. M30010	F-S				1	
Place and/or remove delineation at the request of Traffic or other Caltrans unit. (Normally Day Labor). M30020	F-S				3	

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LEVELS OF SERVICE TABLE

M FAMILY – TRAFFIC GUIDANCE (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Signs						
Inspection of regulatory, warning, or guide signs for acceptable visibility and legibility. (Formal annual night inspection). M40003	F-1					1
Replace damaged or missing "STOP", "YIELD", "WRONG WAY", or other prohibited traffic signs. M40010	U					1
Replace other damaged or missing regulatory signs. M40010	Q					1
Replace damaged or missing warning signs. M40010	Q					1
Temporary repair of damaged guide signs. (Next day if feasible. Consider G-84 as regulatory)* M40010	Q					1
Permanent repair of guide signs. (Patch holes, tighten bolts, clean faces, replace posts, etc.). M40010	R					2
Replace damaged or missing guide signs. M40010 (G84 Only)	F-S or R					2
Expedited Installation Orders to install, relocate, modify, or remove signs that are physically still functional. (Normally Day Labor). M40020	U					1
(Regulatory or Warning) (Guide or Logo))	Q					3

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July 2005

LEVELS OF SERVICE TABLE

M FAMILY – TRAFFIC GUIDANCE - (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Replace weathered, aged, or deteriorated sign panels not meeting traffic needs. M40020	R					1
(Regulatory or Warning) (Guide or Logo)	F-S					1
Routine Installation Orders to install, relocate, modify, or remove signs, which are still functional. (Normally Day Labor). M40020	F-S					3
Engineering inspection of structure mounted signs and sign structures. M41001	F-1/5					1
Eliminate hazardous conditions from damaged overhead sign structures. (A Sign Report is not required for this work). M41010	U					1
Repair overhead sign support structures to reduce or eliminate undesirable safety problems or correct damage. M41010	R					1
General maintenance of overhead sign structures including cleaning and/or painting of the support structure, but not including the sign panels. M41010	F-S					2

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LEVELS OF SERVICE TABLE

M FAMILY – TRAFFIC GUIDANCE (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Roadside Markers						
Replace object markers at critical locations such as narrow bridge approaches. (Next day if feasible). M50010	Q				1	
Repair or replacement of metal or flexible roadside markers. M50010	Q				1	
Place or remove markers used by Maintenance. M50010	F-S				3	
Clean object (Clearance markers at obstructions). M50010	F-2				1	
Place warning or delineation devices. (Expedited request by Traffic). M50020	Q					
Maintenance of markers, marker hardware, paddles or messages. (Placement of new markers or removal of obsolete markers). M50020	F-S				3	
Place or remove roadside delineators at the request of Traffic or other Caltrans unit. (Normally Day Labor). M50020	F-S				3	
Place or remove postmile markers at the request of Traffic or other Caltrans unit. (Normally Day Labor). M50020	F-S				3	

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LEVELS OF SERVICE TABLE

M FAMILY – TRAFFIC GUIDANCE (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Guardrail						
Temporary repairs of damaged guardrail and end terminals to reduce or eliminate obvious hazards. M60010	U				1	
Permanent repairs to guardrails M60010	F-S				1	
Temporary repairs of damaged end terminals to reduce or eliminate obvious hazards. (End terminal only damage). M61010	U				1	
Permanent repairs to end terminals. M61010	R				1	
Median Barrier.						
Temporary repairs of damaged barrier to reduce or eliminate obvious hazards. M70010	U				1	
Erect toppled precast concrete barrier. (Next day if feasible). M70010	Q				1	
Temporary repairs to damaged cable barrier. (Next day if feasible). M70010	Q				1	
Repair broken concrete barrier which has suffered major or significant damage. (Within 2 weeks if feasible). M70010	R				1	
Re-align rail sections. (Pre-cast concrete barrier). M70010	R				1	
Patch minor spalls and nicks. (Concrete barrier). M70010	F-S				3	
Permanent repairs to thrie beam barriers. M70010	F-S				1	

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LEVELS OF SERVICE TABLE

M FAMILY – TRAFFIC GUIDANCE (Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**					Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3			RURAL URBAN RUR URB	
Vehicle Energy Attenuators.						
Remove damaged crash cushions, spilled sand and other debris. M80010	U					1
Repair or replace damaged attenuators M80010	Q					1
Miscellaneous						
Smooth out-of-control vehicle ramp after each use M91014	Q					1
Smooth/scarify out-of-control vehicle ramps. (Spring/fall). M91014	F-2					1

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LEVELS OF SERVICE TABLE

R FAMILY - SNOW AND ICE CONTROL

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type
	ALL STATE HWYS	Snow Route CLASS A B C D E	RURAL URBAN	
Remove Snow and Ice from the Traveled Way.				
Snow removal shall conform to the "Snow Removal" Policy. Snow removal route classifications and authorized service levels are shown. R10000	Refer to Snow Removal Map, Route List, and ClassDefinitions.			1
Cover Snow and Ice on the Pavement.				
Surveillance for slippery conditions and spreading sand, cinders, and/or salt. R20000	U	A - D	Both	1
Pre-mix salt with sand or cinders. R20009	R	A- D	“	2
Reload sandhouses, etc. R20009	R	A - D	“	2
Sweep and dispose of excess sand and cinders. R20010	F-M	A - D	“	3
Maintain Snow Poles, signs and Appliances.				
Repair in place snow poles and other marking devices. R30010	R	A – D	“	2
Repair chain control and other seasonal signs. R30010	R	A – E	“	1
Install snow poles and other marking devices. R30010, R30020, R30030	F-S	A – D	“	3
Maintain snow fences gates, jet roofs, etc. R30010	F-S	A – D	“	2
Install and remove chain control and other Seasonal signs such as parking restrictions. R30010	F-S	A – E	“	3
Install and remove snow fences, gates, jet roofs, etc.	F-S	A - D	“	3
Manned Chain Control Operation.				
Manned chain control operation R40000	U	A - C	“	1
Support Personnel.				
This problem is used to record support personnel. R50000	U		“	
Miscellaneous.				
Avalanche control. R90100	U	A – C	“	1
Snow removal (snow haul) and storage at Maintenance facilities and other work areas. R10010	R	A - D	“	3

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LEVELS OF SERVICE TABLE

S FAMILY - STORM MAINTENANCE / MAJOR DAMAGE

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN	
Sand and Rock Patrol				
Remove or blade fallen rock or drifted sand from the traveled way. (As ordered by the Regional Manager.) S10000	U			1
Patrol during strong winds or heavy rains.				
Place warning devices. S20000, S20100	U			1
Clean debris from drains or roadway. S10000, S20000, S20100	U			1
Pump water off the roadway and make routine checks of pumping plants after heavy rains. S20000, S20100	U			1
Patrol during storms using truck plows or graders. S20000	U			1
Slides, Slip-outs.				
Remove slide material from the traveled way. S30012 S40010	U			1
Clear traveled way of water or air deposited materials. S30012	U			1
Place dikes otherwise control drainage at minor slides and slip-outs. S30012	U			2
Remove slide material from the shoulders. S30012 S40010	Q or R			1 or 3
Backfill slip-outs not in the traveled way. S30012 S40010	Q or R			1 or 3
Dress or fill erosion damage to cut or fill slopes. S30010 S40010	F-S			2
Major Damage - Immediate Actions.				
Place regulatory and warning devices. S40010	U			1
Action to prevent additional damage to roadway facilities. S40010	U			2
Re-open closed roadway facilities. Various Activities could apply. Check Activity Instructions for most appropriate Activity to use.	U			3
Action to keep a facility open to traffic. Check Activity Instructions for most appropriate Activity to use.	U			3
Action to insure the continued operation of a threatened facility. Check Activity Instructions for most appropriate Activity to use.	U			3

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LEVELS OF SERVICE TABLE

S FAMILY - STORM MAINTENANCE / MAJOR DAMAGE
(Continued)

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN	
Major Damage - Public Protection				
Place warning devices, delineation, signs, etc. S40010 M90000	U			1
Maintain warning devices. S40010 M90000	U			1
Provide manned protection such as Flagmen, Lookouts, etc. S40010	U			1
Place, operate, and maintain traffic control devices. S40010 M90000	U			3
Patrol specific damage sites with truck plows or other appropriate equipment. Check Activity Instructions for most appropriate Activity to use.	U			3
Major Damage - Permanent Repairs or Long Term Repairs.				
Make long term and/or permanent repairs. Check Activity Instructions for most appropriate Activity to use.	F-S or S-N			2

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LEVELS OF SERVICE TABLE

T FAMILY

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**	Maintenance Type
	All Facilities	
Facility repair and maintenance		
Repairs and maintenance to Maintenance Station, region offices, and district offices. T20010, T20011, T20012, T30010, T30011, T30012	Varies from immediate response to scheduled maintenance work. Choose the Priority Code that fits the circumstance.	1, 2 or 3
Treatment systems – Maintenance Facilities		
Service and maintain treatment systems T40001	Varies from immediate response to scheduled maintenance work. Choose the Priority Code that fits the circumstance.	1 or 2
Employee Housing		
Repair and upkeep of employee housing T40006	Varies from immediate response to scheduled maintenance work. Choose the Priority Code that fits the circumstance.	1 or 2
Janitorial /Custodial – Maintenance Facilities		
Houekeeping and upkeep T40050	Varies from immediate response to scheduled maintenance work. Choose the Priority Code that fits the circumstance.	1, 2 or 3
HAZWASTE Storage, track, disposal		
Inspection, removal, and reporting of regulated materials and hazardous waste at Maintenance stations. T40100	Varies from immediate response to scheduled maintenance work. Choose the Priority Code that fits the circumstance.	1

The following Maintenance Type codes should only be used for “T” Family Activities that are not directly related to performing a maintenance work activity:

- * SUPP (In support of Activity 100% of time)
- * ADMIN (Administration related)
- * TRNG (Training)
- * MTNG (Meetings)

SUPP (Support) should be used when 100% of the time charged to a Work Order is spent performing tasks that are in support of Maintenance operations such as transporting or servicing equipment, working on snow chains, or equipment preparation.

ADMIN (Administrative) should be used for activities including office work, receiving and issuing materials and supplies, personnel issues, validating or updating highway physical inventory, exams, contract administration, and permit review and inspection.

TRNG (Training) should be used for all training, for the student and the instructor.

MTNG (Meetings) should be used for routine safety, BMP, or staff meetings.

LEVELS OF SERVICE TABLE

W FAMILY

Normally, the **Priority Code** for the “W” Family will be “NA”.

The **Maintenance Type** for the “W” Family will be one of the following :

- * ADMIN (Administration related)
- * TRNG (Training)
- * MTNG (Meetings)

ADMIN (Administrative) should be used for activities including office work, receiving and issuing materials and supplies, personnel issues, validating or updating highway physical inventory, exams, contract administration, and permit review and inspection.

TRNG (Training) should be used for all training, for the student and the instructor.

MTNG (Meetings) should be used for routine safety, BMP, or staff meetings.

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LEVELS OF SERVICE TABLE

Y FAMILY

MAINTENANCE PROBLEM TASK DESCRIPTION	** LEVELS OF SERVICE**			Maintenance Type
	ALL STATE HWYS	HWY CLASS 1 2 3	RURAL URBAN	
Work for Communications				
Work activities necessary to enable technicians to access radio vaults at remote sites Y40000	F-XX or U			1
Snow Park snow removal / sign installation and maintenance				
Snow removal and sign installation and repair within individual SNO-PARK locations Y90000	U			1
Illegal sign removal				
Removal and storage of illegal signs	R			3

The following Maintenance Type codes should only be used for “Y” Family Activities that are not directly related to performing a maintenance work activity:

- * SUPP (In support of Activity 100% of time)
- * ADMIN (Administration related)
- * TRNG (Training)
- * MTNG (Meetings)

SUPP (Support) should be used when 100% of the time charged to a Work Order is spent performing tasks that are in support of Maintenance operations such as transporting or servicing equipment, working on snow chains, or equipment preparation.

ADMIN (Administrative) should be used for activities including office work, receiving and issuing materials and supplies, personnel issues, validating or updating highway physical inventory, exams, contract administration, and permit review and inspection.

TRNG (Training) should be used for all training, for the student and the instructor.

MTNG (Meetings) should be used for routine safety, BMP, or staff meetings.

CIRCUMSTANCES MAY REQUIRE A RESPONSE AND CODING DIFFERENT THAN OUTLINED IN TABLE. INCLUDED WITH MOST TASK DESCRIPTIONS IN THE TABLE ARE IMMS ACTIVITIES COMMONLY USED FOR THAT TYPE OF WORK. DO NOT USE AN ACTIVITY WITHOUT FIRST CHECKING THE ACTIVITY INSTRUCTIONS TO INSURE THE ACTIVITY FITS THE WORK YOU ARE PERFORMING, AND TO INSURE ANY SPECIAL CODING REQUIREMENTS THAT MAY APPLY ARE USED.

CHAPTER SIX

OTHER IMMS REPORTING REQUIREMENTS

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6.1	ROLES AND RESPONSIBILITIES
6.2	SERVICE REQUEST
6.3	HAZMAT REPORTING
6.4	DAMAGE REPORTING
6.04.1	SPECIAL DAMAGE REPORTING INSTRUCTIONS FOR ELECTRICAL CREWS

6.0 INTRODUCTION

In addition to the Work Order recording of daily work activities, IMMS includes other processes which must be followed when circumstances require. These processes include: Service Requests, HAZMAT reporting, and Accident Logs.

This chapter includes general direction, roles, and responsibilities for these reporting requirements.

Detailed instructions for how to complete Service Requests, HAZMAT, and Accident Logs are available at the Maintenance Division/IMMS Intranet web site, or by contacting your District IMMS Coordinator. These instructions must be used in conjunction with this manual to insure that all information that is required is recorded properly.

All Division of Maintenance employees who perform activities related to Service Requests, HAZMAT, and Accident Logs must be diligent in making sure that each process is followed correctly, and that the end product is accurate and submitted timely.

6.1 ROLES AND RESPONSIBILITIES

Service Requests, Accident Logs, HAZMAT

Note: Roles, responsibilities, and business rules for Service Requests, HAZMAT, and Accident Logs can vary by district. Supervisors should communicate with their region office and District HAZMAT Manager to ensure district-specific procedures are followed.

MAINTENANCE SUPERVISOR

- Insure that Service Requests, HAZMAT Info, and Accident Log information are completed accurately, thoroughly, and in a timely manner.
- A Service Request is required anytime there is damage to State property when the responsible party is known, and for all spills. First, a check should be made to determine if there is an existing Service Request for the incident to insure that multiple Service Requests are not created for the same incident. Since the Service Request Number has replaced the damage reporting number used previously on Form R103, multiple Service Requests for one incident can result in billing problems, and responsible party may not be billed correctly for all damages.
- All Work Orders associated with an incident/damage shall be linked to the same Service Request. If multiple Service Requests are created, the Service Requests should be linked, and the “Parent” Service Request should be shared with other crews that will create Work Orders.
- If there are multiple crews involved in the damage repair, the supervisor to whom the Parent Service Request is assigned should resolve the Service Request once all crews have completed their work.
- The only Work Orders that should be linked to the Service Requests are those that include **only the charges that will be billed to the responsible party**.
- For all damage where a responsible party has been identified, the Problem Code ACDNT must be entered in the Problem field on all Work Orders associated with the damage. This will provide an easy way to narrow searches and track this information.
- It is important, and required, to add the code “ACUNK” in the Problem field if the responsible party is not known. This allows the Maintenance Division to track how much is spent on unbillable damage. If the responsible party is identified at a later date, the ACUNK code can be replaced with ACDNT code and an Accident Log can be created.
- If spill is involved, HAZMAT reporting requirements must be followed. Refer to HAZMAT REPORTING section of this chapter and refer to HAZMAT REPORTING INSTRUCTION GUIDE at the Maintenance Division/IMMS Intranet web site for detailed HAZMAT reporting instructions.

MAINTENANCE AREA SUPERINTENDENT

- Create and assign Service Requests for their Maintenance Supervisors.
- Monitor Service Requests to insure they are accurate, properly linked, and resolved in a timely manner.
- Verify that supervisors are sharing Service Request numbers with other crews involved in an accident.
- Monitor the use of ACUNK on Work Orders, which is a code used to classify work done for third party damage where there is no third party to bill.
- Monitor IMMS damage reporting and insure supervisors are completing Accident Logs.
- Insure supervisors enter hazardous spill information on the Service Request Spill tab.

REGIONAL ADMINISTRATIVE OFFICER (RAO)

Note: The following are daily or “as needed” activities performed by the region office. Detailed instructions on how to perform these tasks can be obtained by referring to the most current IMMS Region Training Manual, available at the Maintenance Division/IMMS Intranet web site, or by contacting the District IMMS Coordinator.

- Determine whether a Service Request should be re-assigned to a different supervisor.
- Insure Service Requests have been resolved, and if not, determine whether partial billing is appropriate.
- Check to see if any additional Service Requests have been linked.
- Review the Service Request Work Order tab, to see that all Work Orders have been linked to the Service Request number for the incident.
- Check Accident Logs for completeness before validating.
- Validate Accident Logs so that Accounting can begin the billing process.
- Determine if partial billing is appropriate.
- Insure that Spill tab Info is complete, if applicable. (HAZMAT Manager will also review).
- Maintain on file, a copy of all documentation related to the accident, including CHP or police report, and contractor invoices for the standard retention schedule.

DISTRICT HAZMAT MANAGER

- Insure that all personnel in their district who have responsibilities for spills are aware of instructions for reporting spills per the requirements of the district.
- Monitor IMMS to help insure that information recorded by supervisors is accurate, complete, and timely. Provide feedback to Maintenance Supervisors, Area Superintendents, and Region Managers as warranted to correct deficiencies.
- Sign off spill package when complete.

6.2 SERVICE REQUEST

SERVICE REQUEST ORIGINATION

Normally, supervisors receive Service Requests from dispatchers, region office staff, or Area Superintendents. A maintenance request is logged in IMMS as a Service Request, and the appropriate response personnel (including agencies other than Caltrans) shall be contacted. If Maintenance is responsible for responding to the incident, normally the dispatcher or the region office will create the Service Request and assign to the appropriate supervisor.

The Service Requests appear in a supervisor's Visual Resource Manager (VRM) in IMMS. If the supervisor is notified of the incident, and a Service Request has not been created, the supervisor can ask the source to create the Service Request, or the supervisor creates the Service Request.

WHEN SERVICE REQUESTS ARE REQUIRED

Service Requests are required for all known third party damage that has occurred on State right of way. Service Requests are required for ALL spills, hazardous AND non-hazardous, whether the third party is known or unknown.

Superintendents and supervisors are responsible for determining whether Service Requests "require work".

EMERGENCIES

Radio or telephone contact is still required for circumstances that require immediate attention.

For incidents that require an immediate response, immediate contact is made with appropriate personnel. Also, any required notification to Headquarters or District Communications must still be made. If it is determined that the incident is the responsibility of another agency, Caltrans Maintenance is not responsible, and response not necessary, the Service Request can be so noted and closed.

RESPONSIBILITY FOR RESOLVING SERVICE REQUESTS

The Service Request number is the link for all Work Orders associated with an incident and links other IMMS Forms, including an Accident Log and Spill information.

The Service Request number has taken the place of the damage report number used for Form R103.

If more than one crew responds to an incident, the original supervisor assigned to the Service Request will call the other crews and provide his/her Service Request Number to put on their Work Orders. Multiple crews' Work Orders must be linked to one Service Request. If multiple crews are involved, the original supervisor assigned to the Service Request will resolve it.

In most cases, the work will be completed, and the Service Request will be resolved by the Maintenance Supervisor. In certain circumstances, the supervisor who initiated the Service Request has completed the repairs that their cost center is responsible for, however there are other repairs, or pending HAZMAT charges, that will take an extended period of time to resolve. In such circumstances, the region office will determine if partial billing is appropriate, whether the region office should resolve the Service Requests once all work is completed, or whether the Service Request should be re-assigned to a different supervisor.

MULTIPLE SERVICE REQUESTS

Normally, only one Service Request should be created for each incident. If multiple Service Requests are created, a "Parent" Service Request shall be established, and Service Requests must be linked. Failure to follow this practice can result in incomplete information due to fragmented records and confusion in the process for billing third parties for damage to a State highway.

SERVICE REQUEST GENERAL INSTRUCTIONS

On the following pages are general guidelines for commonly used Service Request forms and fields.

The minimum fields that must be completed for a Service Request are indicated by **REQUIRED** next to the field heading. District or region policy, or certain circumstances, may require exceeding these guidelines. Supervisors should be familiar with their district and region guidelines and policy.

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INFO TAB

The screenshot shows a 'Service Request' form window. The form contains the following fields and controls, each with a numbered callout:

- 1**: Service # (199254)
- 2**: Problem (DEBTW)
- 3**: Call Date (08/03/2004 18:15)
- 4**: Taken By (D03KOCONNOR)
- 5**: Source (POLICE)
- 6**: Customer Contact Requested (checkbox, unchecked)
- 7**: Priority (dropdown menu)
- 8**: Responsibility (dropdown menu)
- 9**: Project (dropdown menu)
- 10**: Budget # (text field)
- Call Duration (00:00)
- # of Calls (1)

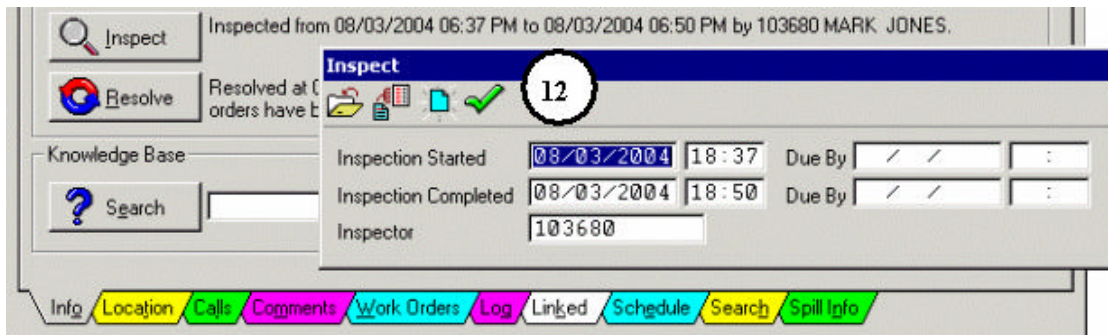
- **01 Service #**
System generated. Service Request number links all Work Orders and the Accident Log associated with the incident.
- **02 Problem** **REQUIRED**
Select a Problem Code from pop-up options.
- **03 Call Date**
Date and time initial call taken. Populates automatically when Service Request is created.
- **04 Taken by**
Person who received and logged the initial call. Populates automatically with the ID of person creating the Service Request.
- **05 Source**
Source of the initial call.
- **06 Customer contact requested**
This box is checked if initial caller requested to be called back.
- **07 Priority**
Same priority options as Priority field on Work Order.
- **08 Responsibility**
Defines government agency or private party that owns the location of the incident. Select option from pop-up.
- **09 Project**
Select Project Number if applicable. Pop-up includes all Project Numbers currently in the system.
- **10 Budget # Not Used**

INFO TAB (Continued)



➤ **11 Schedule**

Can be used in place of *Inspect Inspection Started and Complete*. (#12 below)



➤ **12 Inspect**

Inspection Started – Date and time response began.

Inspection Completed – Date and time incident completed.

Note : Inspection start and complete time can also be recorded in the "Log" using "10 Code" options.

Inspector – **REQUIRED** This field is ID of Supervisor doing the work. Assignment is reflected in the Service Request Log. This field is also used to reassign a Service Request.

Due by – Not used

INFO TAB (Continued)

Resolve

Resolved at 08/03/2004 07:00 PM with code WO WORK ORDER RESOLUTION. Additional work orders have been completed.

Knowledge Base

Search

Request Resolved 08/03/2004 19:00 Due By

Resolution Code WO ☐ No Work Orders Required

Info Location Calls Comments Work Orders Log Linked Schedule Search Spill Info

➤ **13 Resolve** **REQUIRED**

This form must be completed when the Service Request has been completed and may be closed.

Request Resolved – Date and time Service Request completed and closed.

Note: The actual time the incident was completed (1098) can be recorded in the “Log”.

Resolution Code – select the appropriate Code from the pop-up.

No Work Order required – Check this box if no Work Order was created.

Due by - Not used

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LOCATION TAB

Service Request

Service # 199254 Problem DEBTW

Location 1 EB 80 OFR TO 49 - BROKEN GLASS BOTTLES IN ROADWAY
AUBURN PD

2

3 4 5 6

7 8 9

Info Location Calls Comments Work Orders Log Linked Schedule Search Spill Info

- **01 Location** **REQUIRED**
Location of incident must be recorded for all Service Requests in Location field at top of form. Additional information by asset type may be recorded in bottom portion of form.
- **02 NOT USED** Do not record any information in this area.
- **03 Area** **REQUIRED**
District and Region required.
- **04 Sub-area** **REQUIRED**
County abbreviation required.
- **05 District** **REQUIRED**
District required.
- **06 NOT USED**
- **07 NOT USED**
- **08 Accident Number**
If Service Request Number is entered on an Accident Log, the Accident Log number will auto-populate here.
- **09 Asset**
Additional location information can be recorded here. Asset or Roadway.

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CALLS TAB

The screenshot shows the 'Service Request' window with the 'Calls' tab selected. The form contains the following fields and options:

- Service #: 199254
- Problem: DEBTW
- Name: [Text Field]
- First, MI: [Text Field] Title: [Text Field]
- Address: [Text Field]
- City: [Text Field]
- State/Province: [Text Field] ZIP/PC: [Text Field]
- Country: [Text Field] Ref #: [Text Field]
- E-Mail: [Text Field]
- Day: () - x
- Evening: () - x
- Call Date: 08/03/2004 18:15
- Taken By: D03KCONNOR
- Foreign: ☐
- Primary Caller: [Text Field]
- Caller Comments: [Text Field]
- Call List: [Text Field]

The bottom navigation bar includes: Info, Location, Calls, Comments, Work Orders, Log, Linked, Schedule, Search, Spill Info.

Caller information can be recorded here. Multiple calls for the same problem can be recorded.

COMMENTS TAB

The screenshot shows the 'Service Request' window with the 'Comments' tab selected. The form contains the following fields and options:

- Service #: 199254
- Problem: DEBTW
- Comments: Called by TMS for broken beer bottles on travelway on the off ramp. Auburn PD reported incident.

The bottom navigation bar includes: Info, Location, Calls, Comments, Work Orders, Log, Linked, Schedule, Search, Spill Info.

The Comments form is used to record information relative to the Service Request that may be important for future reference. These Comments can be used to record the SPILL NARRATIVE.

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WORK ORDER TAB

The screenshot shows a software window titled "Service Request". At the top, there is a toolbar with various icons. Below the toolbar, there are two input fields: "Service #" with the value "199254" and "Problem" with the value "DEBTW". The main area of the window is divided into two sections. The top section is a table with the following columns: "Work Order #", "Activity", "Asset", "Act Type", "Act Group", "Initiated", "Scheduled", and "Complete". The first row of data shows "625945", "D20002", "RW", and dates "08/03/2004" and "08/03/2004". The bottom section is another table with columns: "Asset", "Fr Type", "Unit ID", "To Type", "Unit ID", "#", and "Address". To the right of these tables are several buttons: "Inquire", "Insert", "Modify", "Select", and "Refresh". Below the "Refresh" button is a "Street # +/-" field with the value "0". At the bottom of the window is a tabbed interface with the following tabs: "Info", "Location", "Calls", "Comments", "Work Orders", "Log", "Linked", "Schedule", "Search", and "Spill Info". The "Work Orders" tab is currently selected.

Work Order #	Activity	Asset	Act Type	Act Group	Initiated	Scheduled	Complete
625945	D20002	RW			08/03/2004	08/03/2004	

Asset	Fr Type	Unit ID	To Type	Unit ID	#	Address
-------	---------	---------	---------	---------	---	---------

All Work Orders associated with the incident and linked to the Service Request can be accessed here. Use the "Open Form" button to open a Work Order.

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LOG TAB

Service # 199254 Problem DEBTW

Log Type	Description	Log Started	Log Ended	Entered By
10-10	OUT OF SERVICE	08/03/2004 19:02		D03K0CC
10-98	ASSIGNMENT COMPLETE	08/03/2004 18:50		D03K0CC
10-97	ARRIVED ON SCENE	08/03/2004 18:45		D03K0CC
10-8	10-8 IN SERVICE	08/03/2004 18:37		D03K0CC
SR-UPD	SERVICE REQUEST REASSIGNMEN	08/03/2004 18:26	08/03/2004 18:26	D03K0CC
NOTIFI	NOTIFIED/CALLED	08/03/2004 18:15		D03K0CC

Insert
Modify
Remove

Info Location Calls Comments Work Orders Log Linked Schedule Search Spill Info

The Service Request LOG tab can be used to record date and time of various milestones during the course of an incident. Assignment or re-assignment of a Service Request is automatically recorded on this tab when entry of employee ID is made in INSPECTOR. (See number 12).

6.3 HAZMAT REPORTING

A SERVICE REQUEST IS REQUIRED FOR ALL SPILLS

A Service Request is required for all spills, whether the substance is known or unknown, whether or not there is a responsible party, and regardless of whether the district has required a Spilled Substance Report.

The Spill Info tab is located on the Service Request.

INSTRUCTIONS FOR HAZMAT REPORTING

Spilled Substance Reports, Spill Diaries, Spill Narratives, etc., are required per district policy and procedures. Supervisors must be familiar with the requirements for their district.

Roles and responsibilities for spills can vary by district, and may depend on the nature of the incident. Normally, the Maintenance Supervisor is responsible for all documentation associated with a spill, with the exception of some of the information related to a spill contractor. For example, the District HAZMAT Coordinator may choose to enter the contractor costs in the Extra Item tab once all invoices have been received, or may delegate this responsibility to the Maintenance Supervisor. Another example where roles may vary is the responsibility for compiling all manifests and including them with a spill package. Therefore, it is essential that districts establish a protocol for spills, and that all Maintenance personnel that may have a role are aware of these procedures.

Detailed instructions for HAZMAT reporting are available at the Maintenance Division/IMMS Intranet web site. You must review these instructions to insure you complete all forms required by your district accurately and thoroughly. Any questions about these instructions or district specific procedures should be directed to the District HAZMAT Coordinator or District IMMS Coordinator.


HAZMAT REPORTING (Continued)

The District HAZMAT Coordinator is responsible for insuring that all personnel in their district that have responsibilities for spills are aware of instructions for reporting spills per the requirements of the district.

The District HAZMAT Coordinator should monitor IMMS to insure that information recorded by supervisors is accurate, complete, and timely. HAZMAT Coordinators should provide feedback to Maintenance Supervisors, Area Superintendents, and Region Managers as warranted to correct deficiencies.

The final step for recording spills in IMMS is approval from the District HAZMAT Coordinator that all necessary documentation and invoices have been accounted for and are thoroughly completed. The HAZMAT Coordinator “signs off” on spills by checking these two boxes on the Service Request Spill tab:

- HAZMAT DISTRICT REVIEW
- SPILL PACKAGE COMPLETE

		Caltrans - IMMS Division of Maintenance Help Desk (866) 774-4667 Fax (916) 323-0341		Incomplete Spill Package Report							
Report Date: 11/01/2004 2:27:14PM		Page 1 of 1									
District: 03 Region: 03709 Date From: 8/1/2004 To: 11/1/2004											
Service Req. #	Cost Center	Roadway ID	Spill Date/Time	Cleanup Complete Date/Time	CT Site Safety Plan	Con- tractor Invoice	Hazard Spill diary	Spill Narra- tive	Spill Subst. Report	Manif. Ship. Papers	Other
Region: 03709 SUTTER/SIERRA REGION											
199270	03712	03-COL-016	08/03/2004 07:52:00PM	08/03/2004 11:00:00PM							LUMBER

6.4 DAMAGE REPORTING

ACCIDENT LOGS are required when there is a known responsible third party. The Problem **ACUNK** must be entered on the Work Order if the responsible party is unknown.

ACUNK can be removed, and an Accident Log can be completed later if the third party is determined at a later date.

These guidelines are not intended to cover every detail of the Accident Log process. Refer to the *Damage Reporting Instruction Guide* available at the Maintenance Division/IMMS intranet web site for detailed instructions.

The Maintenance Division tracks the cost of all damage to State highways, regardless of whether or not it is known who caused the damage. Where possible, Maintenance bills the responsible third party for the cost of repairing the asset or feature. Field, region, district, and Headquarters staff will use IMMS to track, report, and bill for damage to State highways.

A Job Cost Record (JCR) is captured by Work Order information. The CHP Report will be collected and filed at the region office. The CHP Report number and certain information from the CHP report will be captured on the Accident Log in IMMS. Other documents and invoices associated with an accident or spill shall be kept on file in the district. Examples include the vendor invoices and the Hazardous Spill Diary.

The Service Request Number should be written on all documents associated with the incident for filing and future reference.

Damage reporting is a required process. All Division of Maintenance employees who perform Damage Reporting related activities must follow the process correctly.

Individuals responsible for the accident are held accountable and billed for damage to State property. Therefore, it is important that information in IMMS is accurate, thorough, and timely.

It is also important that the Maintenance Division tracks unbillable damage (unknown third party) so that:

- If the responsible party is identified at a later date, they can be billed for the damage.
- The Division can account for the resources expended for damage to State property in cases where funds are not recovered and budgeted appropriately for the future.

Each district is expected to establish processes that insure that the end product is accurate and thorough per the expectations of the Division. The region office has an important role in the Accident Log process.

The region office is the last stop before Accident Log information is validated and forwarded to Accounting, where the billing process begins. Therefore, the region office should review all accident-related information to insure accuracy and completeness before validating.

6.04.1 Special Damage Reporting Instructions for Electrical Crews

Supervisors responsible for maintaining shared electrical assets must be familiar with the Special Damage reporting Instructions outlined in the Electrical Damage Reporting Procedures memo.

The costs of maintenance on many Caltrans assets (Traffic Signals, Highway Lighting, etc.) are shared with a local agency (city, county, etc.). When these shared assets are damaged by an unknown third party, the State bills the local agency for a share of the repair costs through a system separate from the Signal and Lighting Billing System (SLB). To bill through this separate system, an Accident Log is required to capture the repair costs.

If the asset is not shared with a local agency and the responsible party is unknown, there is no need for an Accident Log, as Caltrans is 100 percent responsible for all the repair costs. Therefore knowing if an asset is not shared can save time because an Accident Log would not be required. The information needed to determine the sharing status is located in IMMS on the asset information form.

Complete instructions and the asset information form are located at the Maintenance Division/IMMS Intranet web site. Any questions regarding this process or the instructions should be directed to your District IMMS Coordinator.

CHAPTER SEVEN

REPORTING IN TOPSS

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7.0	MAINTENANCE EXPENDITURE AUTHORIZATIONS
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7.0 MAINTENANCE EXPENDITURE AUTHORIZATIONS

7.0.1 COMPARISON TO IMMS ACTIVITY STRUCTURE

Maintenance Family Problems are single phase EA's and (in TRAMS) begin with "5". Staff reporting in **TOPSS** use Maintenance Expenditure Authorizations that identify work at Family Problem level. These EA's in most, but not all, cases align with the IMMS Activity structure at the Family Problem level. The chart below provides a general comparison of the IMMS Activity and TOPSS reporting structures. Family Problem level EA's are also used for accounting/purchase documents.

Maintenance Management System	IMMS ACTIVITY	Accounting Document And TOPSS TIME REPORTING	Matches Transportation Program
	<u>Family</u>	<u>EA</u>	<u>Program</u>
Flexible Pavement	AXXXXX	5AX 000	HM-1
Rigid Pavement	BXXXXX	5BX 000	HM-1
Slopes/Drainage/Vegetation	CXXXXX	5CX 000	HM-2
Litter/Debris	DXXXXX	5DX 000	HM-2
Landscaping	EXXXXX	5EX 000	HM-2
Storm Water	FXXXXX	5FX000	HM-2
Public Facilities	GXXXXX	5GX 000	HM-2
Bridges	HXXXXX	5HX 000	HM-3
Other Structures	JXXXXX	5JX 000	HM-3
Electrical	KXXXXX	5KX 000	HM-4
Traffic Guidance	MXXXXX	5MX 000	HM-4
Snow & Ice Control	RXXXXX	5RX 000	HM-6
Storm Maintenance	SXXXXX	5SX 000	HM-6
Support	TXXXXX	5TX 000	HM-5
Training/Field Auxiliary Services	WXXXXX	5WX 000	HM-5
Work for Others	YXXXXX	Specific EA	Various

7.0.2 FAMILY PROBLEM REPORTING STRUCTUREDifference in A and B Family Problem structures

All **A** and **B** Family Maintenance Activities in IMMS are within Family problem **A1XXXX** and **B1XXXX**. Staff not reporting in IMMS still use the old Family Problem Structure, including A1, A2, A3, A4, A5, and A9.

FLEXIBLE PAVEMENT

5A1000	CRACK SEAL
5A2000	POOR RIDE QUALITY
5A3000	STRUCTURAL PAVEMENT FAILURE
5A4000	POTHoles / LOCAL DEPRESSIONS
5A5000	PREVENTATIVE MAINTENANCE (SEALS)
5A9000	MISC

RIGID PAVEMENT

5B1000	CRACK / JOINT REPAIR
5B2000	POOR RIDE QUALITY
5B3000	STRUCTURAL PAVEMENT FAILURE
5B4000	BRIDGE APPROACH / DEPARTURE
5B5000	PAVED SHOULDER / PREVENTATIVE MAINTENANCE
5B6000	PAVED SHOULDER REPAIR
5B9000	MISC

SLOPES / DRAINAGE / VEGETATION

5C1000	LATERAL SUPPORT
5C2000	ROADSIDE VEGETATION
5C3000	ROADSIDE VEGETATION
5C4000	FENCES
5C5000	DITCHES / CHANNELS
5C5000	CURBS / DIKES
5C6000	CULVERT OPENINGS
5C6000	CULVERTS
5C6000	OVERSIDE DRAINS
5C6000	SLOTTED DRAINS
5C6000	DRAINAGE INLETS
5C7000	HORIZONTAL DRAINS
5C7000	UNDER DRAINS
5C9000	WALLS
5C9000	BIKE PATH
5C9000	SIDEWALKS
5C9000	CATTLEGAURD
5C9000	DRYWELL
5C9000	MANHOLES

FAMILY PROBLEM REPORTING STRUCTURE (Continued)**LITTER / DEBRIS / GRAFFITI**

5D1000	DEBRIS/CARCASS PICK UP
5D2000	ROAD PATROL INSPECTION AND INVESTIGATION
5D3000	NOTE: CHARGE SWEEPING TO 5F2000
5D4000	LITTER AND DEBRIS
5D5000	SPILLS
5D6000	GRAFFITI
5D7000	HAZ MATERIAL STORAGE, DISPOSAL, TRACKING
5D9000	ILLEGAL SIGN REMOVAL

LANDSCAPING

5E1000	WEED CONTROL
5E2000	PRUNING / THINNING / REMOVING / REPLACING
5E3000	IRRIGATION
5E9000	MISC

STORM WATER

5F1000	TRAINING / MEETINGS
5F2000	DRAINAGE / SWEEPING
5F3000	INSPECTION / REPAIR / REPLACE
5F4000	SOIL / SEDIMENT
5F4000	STOCKPILES
5F4000	SNOW HAULING
5F5000	EVAL / DEVELOP / VEG MGMT / NPDES PERMIT / FIELD ACTIVITY
5F6000	INVESTIGATION / OVERSIGHT REMOVE / CLEANUP
5F7000	STRUCTURAL BMP (BEST MANAGEMENT PRACTICE)
5F8000	OVERSIGHT OF CONSTRUCTION / CONTRACT
5F9000	FACILITY: INSPECTION / NPDES PERMIT / REPAIR / OPERATIONS

SERVICE FACILITIES

5G1000	ROADSIDE RESTS
5G2000	VISTA POINTS
5G3000	INSPECTION STATIONS
5G4000	PARK AND RIDES

BRIDGES

5H1000	SUBSTRUCTURE
5H2000	SUPERSTRUCTURE
5H3000	DECK
5H3000	APPROACH SLAB
5H4000	JOINTS
5H4000	BEARINGS
5H5000	RAILINGS
5H6000	DRAINAGE SYSTEMS
5H7000	PAINTING
5H8000	MECHANICAL / ELECTRICAL
5H9000	MISCELLANEOUS

FAMILY PROBLEM REPORTING STRUCTURE (Continued)

OTHER STRUCTURES

5J1000	PUMP PLANTS
5J2000	TUNNELS
5J3000	FERRY BOATS
5J4000	SFOBB TERMINAL BLDG.
5J5000	TOW SERVICES AND BYCYCLE SHUTTLE
5J6000	CHANNELIZERS
5J7000	TOLL PLAZAS
5J9000	CALIBRATE / TEST REPAIR EQUIPMENT

ELECTRICAL

5K1000	LIGHTING
5K2000	SIGN LIGHTING
5K4000	TRAFFIC SIGNALS
5K5000	FLASHING BEACONS
5K6000	RAMP METERS
5K7000	TRAFFIC SURVEILLANCE (TOS) EQUIPMENT
5K8000	TRAFFIC COUNTERS
5K9000	MISCELLANEOUS

TRAFFIC GUIDANCE

5M1000	STRIPING
5M2000	MARKINGS
5M3000	PAVEMENT MARKERS
5M4000	SIGNS
5M4000	SIGN STRUCTURES
5M5000	DELINIATORS
5M6000	GUARDRAILS
5M7000	MEDIAN BARRIER
5M8000	ATTENUATOR
5M9000	MISCELLANEOUS

SNOW / ICE CONTROL

5R1000	SNOW
5R2000	SAND AND SALT
5R3000	SNOW POLES
5R4000	CHAIN CONTROL
5R5000	SUPPORT PERSONNEL
5R9000	MISCELLANEOUS

STORM MAINTENANCE

5S1000	SAND / ROCK PATROL
5S2000	STORM PATROL
5S3000	MINOR SLIDES AND SLIPOUTS / STORM DAMAGE / CLEARING
5S4000	MAJOR SLIDE/SLIP REMOVE/REPAIR

FAMILY PROBLEM REPORTING STRUCTURE (Continued)

SUPPORT

5T1000	HEADQUARTERS MAINTENANCE PROGRAM MANAGEMENT
5T2000	DISTRICT OFFICE MANAGEMENT
5T3000	GENERAL OPERATIONS REGION OFFICE
5T4000	MAINTENANCE FACILITIES – GENERAL OPERATIONS
5T5000	MAINTENANCE STATION CUSTODIAL
5T6000	MAINTENANCE STATION MINOR REPAIRS
5T7000	RECEIVING OR ISSUING MATERIALS
5T9000	MISCELLANEOUS

TRAINING AND FIELD AUXILERY SERVICES

5W1000	LEGALLY MANDATED
5W2000	KINGVALE
5W3000	META
5W4000	OTHER TRAINING
5W5000	FIELD AUXILIRY SERVICES
5W9000	MISCELLANEOUS

WORK FOR OTHERS

5Y1000	ASSIST MECHANIC
5Y2000	SERVICING AND LEVEL 1 PM
5Y3000	TRANSPORTING EQUIPMENT
5Y4000	COMMUNICATION EQUIPMENT REPAIR
5Y5000	PERMITS
5Y9000	MISCELLANEOUS

7.0.3 T FAMILY

The **T Family** is intended for:

- Work activity associated with maintenance performed at facilities or warehouse operations.
- Superintendents and district office staff when work cannot be directly related to highway maintenance operations.
- Region office staff and managers to charge their time.
- District or region warehouse operations

Maintenance Area Superintendents and District Office staff (except warehouse staff):

When work activities can be directly related to highway maintenance (field operations or engineering related work) such as preparation of Major Maintenance projects and contracts, staff time should be charged to the appropriate Family Problem, not the “T” Family.

In the paragraph above, “directly related” implies either on-site, coordinating or assisting with a field operation, or not on-site, but working on documentation directly related to the work.

These instructions are not intended to discourage the use of the “T” Family when appropriate to use. Of equal importance is that we should not charge to any Family if charges are not legitimate.

T1000 HEADQUARTERS MAINTENANCE PROGRAM MANAGEMENT

Headquarters Maintenance Program Management will be coded by Division of Maintenance Engineers and staff sourced in Sacramento.

NOTE: Do not code to this Family Problem when:

- Performing field inspections of facilities.
- Doing project-related design or construction engineering, and a specific Expenditure Authorization is assigned.
- Doing engineering inspection, reviews, investigations, and studies for which special blanket Expenditure Authorizations have been issued by Headquarters Structures Maintenance.
- Conducting or attending training (see “W” Family).

T2000 DISTRICT OFFICE MANAGEMENT

District Office staff time.

NOTE: When work activities can be directly related to highway maintenance, including field operations or engineering related work such as preparation of Major Maintenance projects and contracts, staff time should be charged to the appropriate Family Problem or EA, not the “T” Family.

When conducting or attending training, use “W” Family.

T2600 TOLL BRIDGE PROPERTY DAMAGE INSURANCE

Toll Bridge Property Damage Insurance. Accounting documents only.

INCLUDES: Toll Revenue funded Toll Bridges. (Do not report hours)

T3000 REGION/AREA OFFICE MANAGEMENT

Region or Area office management by region or Area Superintendents. Charge to this Family Problem only when the work to be performed is not covered by any other Family Problem definition. All work other than "office time" behind a desk should be chargeable to the appropriate Family Problem.

Includes overtime when related to normal office support only, e.g. lack of personnel to accomplish work because of sick leave, vacant position, etc.

Do not use for :

- Direct support of specific incidents.
- Performing field inspection of a specific Family Problem. Charge to that specific Family Problem.
- Damage claims.
- Emergency Callback or Callback Differential. Charge to the appropriate Family Problem.

T4000 MAINTENANCE STATION GENERAL OPERATIONS

Maintenance Station general operations will be reported to this code for these activities:

- CAL-OSHA work on Maintenance stations.
- Operating expenses such as stationary and office supplies, utility billing, miscellaneous work.

Note: **Do not** use 5T4000 for hazardous material storage, disposal, and tracking at Maintenance facilities. Use **5D7000** with Special Designation MHAZWST.

- Special Designation may be required for this Family Problem.

Activity Code 052 is required.

T5000 MAINTENANCE STATION CUSTODIAL WORK

Maintenance Station custodial work on buildings and grounds will be reported to this Family Problem.

Activity Code 052 is required.

T6000 MAINTENANCE STATION MINOR REPAIRS.

Maintenance Station minor repairs will be reported to this Family Problem.

Activity Code 052 is required.

T7000 MAINTENANCE STATION RECEIVING OR ISSUING MATERIALS, TOOLS, ETC.

This code should only be used by Maintenance employees (other than supervisors) to charge time while working in a region or district warehouse, receiving, issuing, or performing inventory of materials, supplies, or tools.

Note: Maintenance Supervisors may charge to Labor Other Code **TMAT** in IMMS for time spent receiving, issuing, or performing inventory of their working stock.

T8000

Do not charge time to this Family Problem. It is important that the user recognizes that the T8000 Family Problem refers to the Working Stock System.

T9000 MISCELLANEOUS

Work not covered in other “T” Family Problems.

7.0.4 W FAMILY

W1000 LEGALLY MANDATED TRAINING

Unless special coding otherwise provided:

- For course development, use Special Designation MA342 and TRAMS Activity Code 058.
- Instructors use Special Designation MA343 and TRAMS Activity Code 058.
- Students use TRAMS Activity Code 059 ONLY.
- For mandated safety meetings use TRAMS Activity Code 049.

Note:

- For META charges see W3000.
- For Electrical Maintenance Training Center charges see W4000.
- For Storm Water Orientation/Training use F1000.

W2000 KINGVALE MAINTENANCE ACADEMY

W2000 HAS BEEN TEMPORARILY EXPIRED DUE TO THE KINGVALE MAINTENANCE ACADEMY BEING DISCONTINUED.

W3000 MAINTENANCE EQUIPMENT TRAINING ACADEMY - META

- For course development, use Special Designation MA342 and TRAMS Activity Code 058.
- Instructors use Special Designation MA343 and TRAMS Activity Code 058.
- Students use TRAMS Activity Code 059 ONLY.

W4000 OTHER TRAINING

All other training not listed in W1000, W2000, or W3000 Activities. Includes chemical spill gear inspection and dress rehearsal.

Unless Special coding otherwise provided:

MA342 Course Development use Activity Code 058

MA343 Course Instructors use Activity Code 058

Students use Activity Code 059

For ELECTRICAL MAINTENANCE TRAINING CENTER use Special Designation MEMTC.

Instructors use Activity Code 058

Students use Activity Code 059

On- the- job training should be charged to the appropriate Activity, not to the W Family. This includes Equipment training and qualification.

W5000 FIELD AUXILIARY SERVICES

Field Auxiliary Services in support of Maintenance. Including:

- Time for emergency transportation of employee for first medical contact for job-related Injury (on the injury day only) regardless of the day of the week.
Subsequent treatment should be charged to Sick Leave or other appropriate employee time.
Use TRAMS Activity Code 099.
- Modified work time **that could not be charged to a specific Activity.**
Use TRAMS Activity Code 099.
- Drug testing
Use Special Designation 6DRGTST and TRAMS Activity Code 083.
- Time for job required Physical Examinations and Licensing.
Use TRAMS Activity Code 099.
- Release time for State Civil Service Exams exams, and interviews when scheduled during employee's normal work hours.
Use TRAMS Activity Code 099.
Note: Do not charge to W5000 when working on exam preparation or as member of panel. **(See W9000).**
- Moving Expenses.
- Time as a subpoenaed witness for a matter not related to state business if the employee is not a party to the suit; otherwise, the employee must use vacation, CTO, or other time off.

Please see below for charging time **specifically for LEGAL tort cases as a witness.**

Chg District:	1-12 (where the accident occurred)
EA:	937500
Subjob:	3LEGL
Special Designation :	Provided by the attorney
F AE:	2
Activity:	Use TRAMS Activity code 003 (Administrative)

W9000 MISC

Miscellaneous not defined in other W Activities. Includes examination preparation and certificate testing, supervisor's meeting, employee relations, and grievances.

Exams:

Chairperson use TRAMS Activity Code 014.

Consulting/Advisor use TRAMS Activity Code 015.

When serving as panel member use TRAMS Activity Code 016.

Note: Do not charge time taking Civil Service Exam or attending interview to W9000. (See **W5000**).

Employees who participate in AA/EO program activities are to use Activity Code 075 or 077.

7.1 OTHER EXPENDITURE AUTHORIZATIONS

When charging Work for Others, or to a project, staff reporting in TOPSS use the project EA, not a Maintenance EA. Always insure that the EA you are using is valid, and you have been given authorization to use it before charging against it.

Multiphase EA's for projects usually originate in districts. Most multiphase EAs are established for Capital Outlay projects that require use of **two or more work phases**. However, multiphase EAs may be established for other work when appropriate. For example, Major Maintenance projects usually require use of a multiphase EA to cover design, contract and construction engineering phases. Contact your District IMMS Coordinator or District Resource Manager when you have questions regarding the appropriate use of any Expenditure Authorization.

When using **multiphase** EA's, unless other wise directed, use the FAE/Object Code of 1 038.

Single phase EA's generally start with a 5 or 9 and may be any combination of numbers and letters. Single phase means that the EA does not change.

Day Labor projects are classified and funded as capital outlay with single phase EAs in the **916xxx** grouping. Contact your District IMMS Coordinator or District Maintenance Engineer to insure your Day Labor project has been approved and to insure you have been provided the appropriate E.A. to charge to.

Some single phase EA's are used routinely (example: certain toll bridge maintenance work). EA's routinely used by field crews statewide are included in the Maintenance Activity Instructions located in Maintenance Manual Volume, "Part Two", Chapter 12. Other Single Phase EA's are assigned at the district level, and may not be included in this manual.

Staff reporting in TOPSS should use the appropriate EA if they are performing work directly related to purpose of the EA.

7.2 Subjobs

Subjobs are used whenever work is performed at toll bridges and toll bridge approaches, and are sometimes used in conjunction with Expenditure Authorizations. Staff who perform work directly related to toll bridge maintenance work or toll bridge operations should use the appropriate EA/Subjob combination. The Activity Instructions include specific instructions for coding requirements. Staff reporting in TOPSS cannot use the IMMS Activity and therefore must use the special EA in place of Maintenance EA, along with the Subjob. For example, a supervisor charges to Activity J70013, EA 926851, Sub Job 3T93B for performing work on booth and canopy maintenance at the Antioch bridge in IMMS. An Area Superintendent charging time in TOPSS would use EA 926851 and the Subjob.

7.3 TRAMS Activity Code

The standard Maintenance TRAMS Activity Code normally used by Maintenance Area Superintendents and field Region Managers is 002.

Headquarters, District Office, and Region office staff who perform Maintenance **administrative** duties and are non-supervisory use TRAMS Activity code 003. Staff that have supervisory classifications and supervise administrative work, or are Exempt employees (Example, E48 Area Superintendent) use TRAMS Activity code 002.

When charging to the “T” or “W” Family, use the appropriate Activity Code for the Family Problem.

When using multiphase EA's, unless other wise directed, use the FAE/Activity Code of 1 038.

7.4 Special Designations

With the use of Project Numbers in IMMS, the use of Special Designations Numbers has been greatly reduced. Special Designations only need to be used if there is a need to report in TRAMS, for purchasing documents or contracts, and for staff reporting in TOPSS. If a Special Designation Number is needed, contact your District IMMS Coordinator.

7.5 Reports

Details regarding staff work hours, use of leave credits, and expenditures must be obtained from TOPSS or TRAMS. Expenditure totals for Maintenance staff that do not report in IMMS are included in the IMMS Resource Usage Report, Other Expenditures, in the Other Labor column.

Use of Project Numbers and Special Designation Numbers

It is important for managers and budget staff to recognize that if expenditures for an incident or maintenance operation are tracked by Project Number for crews reporting in IMMS, and by Special Designation for staff not reporting in IMMS, separate reports will be needed to account for all charges.

Difference in A and B Family Problem structures

All A and B Family Maintenance Activities in IMMS are within Family problem A1XXXX and B1XXXX. Staff not reporting in IMMS still report to the old Family Problem Structure, including A1, A2, A3, A4, A5, A9. For reporting purposes, if data must be broken down below the Family level to the specific work activity (crack sealing, paving, or sealing), separate reports will be required.

See Chapter 10, “Coding Definitions” for more information regarding Expenditure Authorizations and other coding. Contact your District IMMS Coordinator or District Resource Management Office with questions about coding requirements.

CHAPTER EIGHT

REPORTS AND MONITORING

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8.5	EMPLOYEE AND DAILY TIME REPORTS
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July 2005

8.0 INTRODUCTION

IMMS reports contain the flexibility to filter data based on specific selection criteria such as date range, district, region, crew, asset, Activity, and other criteria depending on the selected report.

There are four ways to access reports in IMMS. The first three ways of accessing reports in IMMS are standard Hansen reports. The third option includes those reports that were designed specifically for Caltrans.

1. From the Code Definitions
2. From a Lookup
3. From a Menu with a Reports option. These include the File, Accident, Work Order, Customer or Part menu.

This chapter includes a description of the basic IMMS reports and where to access them. Also included are sample reports or lookups for a few of the most commonly used report options.

For a complete list of available reports, complete list of definitions, and additional guidance on how to run IMMS reports, go to the Maintenance Division/IMMS Intranet Web site.

8.0.1 ACCESS RIGHTS AND SYSTEM LIMITATIONS

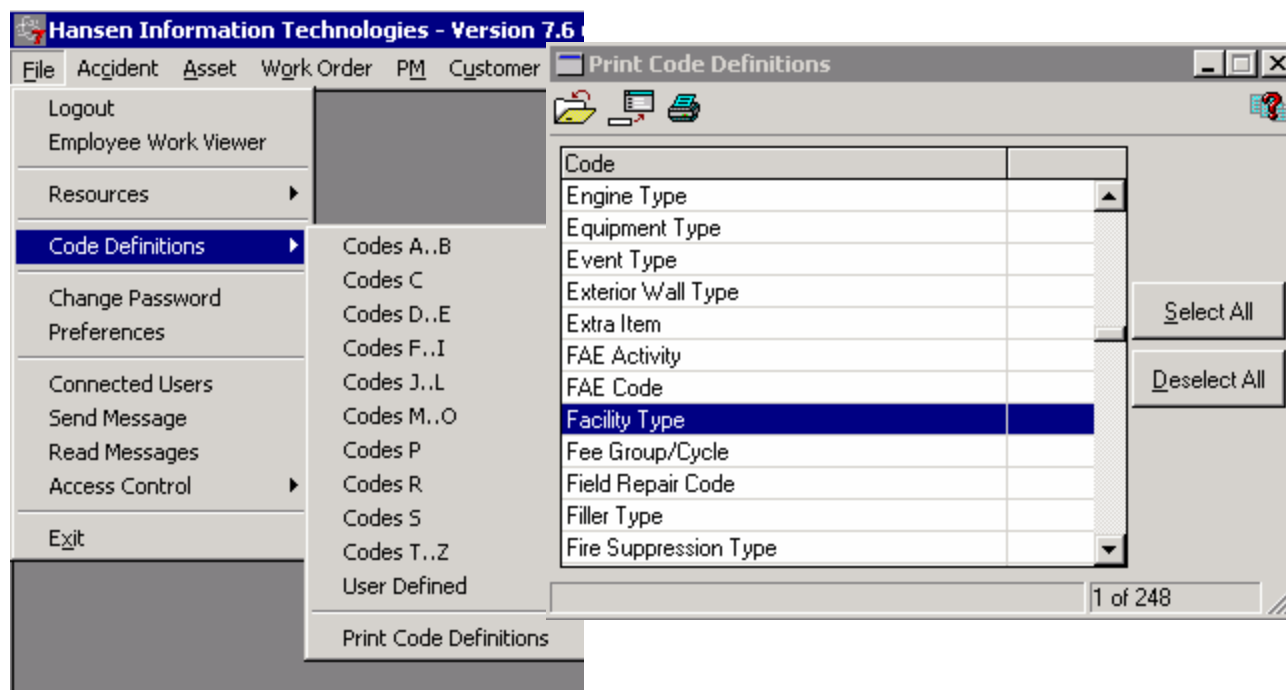
The ability to access the IMMS reports discussed in this chapter is contingent upon the end-user's access rights. Therefore, not all reports that are described in this chapter are available to all end-users. Also, end-users may be unable to run certain reports if amount of data requested is too large.

If there is a report that you need, and for any reason are not able to generate the report, contact your District IMMS Coordinator for assistance.

July 2005

8.1 CODE DEFINITIONS AND LISTS

IMMS provides the end-user with the ability to generate lists from the Code Definitions. To access them go to the **File Menu** to **Code Definitions** to **Print Code Definitions**. This will include IMMS Activity and Special Designation lists.



Caltrans - IMMS

Division of Maintenance
Help Desk,
(866)774-4667 Fax (916)323-0341

Report Date 11/10/2004 07:20 AM

Submitted By

Code	Description
Facility Type	
CENSHP	CENTRAL SHOP (ELECTRICAL)
DO	DISTRICT OFFICE
MAINT	MAINTENANCE STATION
RO	REGION/AREA OFFICE
S/SS	SALT AND SAND STORAGE
SATLIT	SATELLITE YARD
End of Code Definitions.	

July 2005

8.2 LOOK-UP FEATURE

Lookups serve as a tool to perform searches in various forms throughout IMMS. Using a **Lookup**, the end-user can select or enter search criteria and generate reports. Lookups can be run from many of the forms in IMMS, including Work Order, Service Request, Accident Log, Parts, and many other forms. Different types of forms include different lookup options.

The example below is a Work Order Lookup. A Work Order Lookup allows you to narrow your search to get the specific detail needed. For example, you can lookup all Work Orders by Crew, Date Range, Roadway ID, Activity, Work Order Status (including as Initiated or Completed), Project Number, Maintenance Type, or Problem.

Tabs on the Lookup form provide additional options to allow you to request more specific data, including by Asset, TRAMS Code (EA, Special Designation, etc.), Electrical, or Bridge. Different types of Lookups include different options to query.

Work Order #	Status	Activity	Asset	Assigned	Initiated	Scheduled	Started	Due	Completed
651550	Completed	A10010	RW	104638	09/13/2004				09/16/2004
653511	Completed	A10010	RW	104638	09/21/2004				09/29/2004
653514	Completed	A10010	RW	104638	09/22/2004				09/29/2004
653520	Completed	A10010	RW	104638	09/23/2004				09/29/2004
653909	Completed	A10010	RW	104638	09/16/2004				09/17/2004
655150	Completed	A10010	RW	102697	09/20/2004				09/21/2004

July 2005

8.3 REPORTS AVAILABLE FROM THE WORK ORDER MENU

From the **Work Order Menu** there are four options that contain reports:

- FPS – Field Planning and Scheduling
- Reports
- Electrical Reports
- Chemical Usage Reports

For these IMMS Reports, options allow you to narrow your search in order to obtain the specific information you need as follows:

(Search Criteria - Drop Down Box Options)

➤ **WO Status :**

Work Order Status options include: Open, Closed, All, Assigned.

➤ **Sort By :**

Determines how the results of the search criteria will be displayed. Some examples of Sort by include Work Order number and Part number.

➤ **Search Style :**

Determines how the search criteria will be displayed. If you want to locate only those items that match the search criteria entered, then select the **MATCH** option. Should you choose to locate all items that begin with the search criteria you've selected, then select the **START** option. **Normally you will select MATCH. There are very few situations you would select START as a Search Style.** *Note: *Start will bring all information within your date range. It will include routes higher than your selection and activities greater than your selection.*

➤ **Report Type :**

Where available, report information may be displayed in detailed or summary views.

➤ **Subtotal On :**

Determines which search criteria field a subtotal will be performed for expenditure reports.

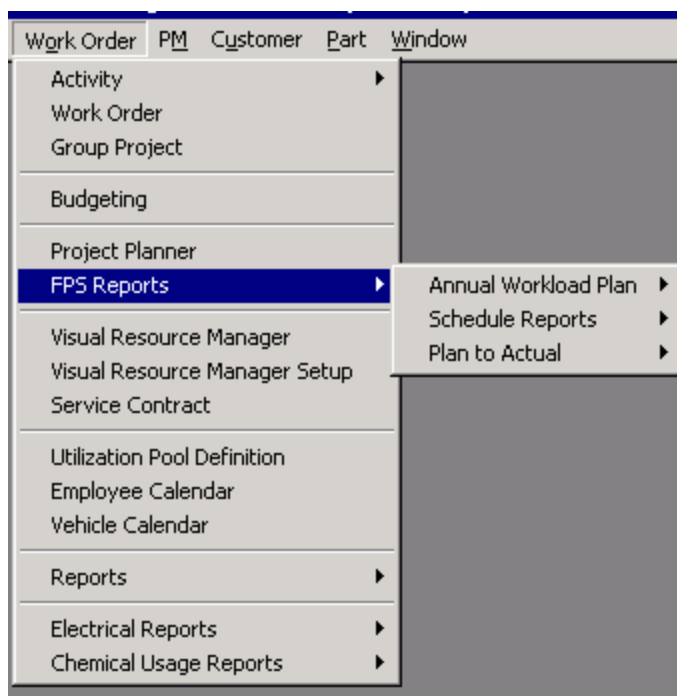
➤ **Detailed On :**

Additional details may be selected by clicking in the appropriate checkbox such as Labor, Material, Vehicle, Contractor, and Extra Items.

July 2005

REPORTS AVAILABLE FROM THE WORK ORDER MENU (Continued)

FPS (FIELD PLANNING AND SCHEDULING) REPORT



Annual Workload Plan - There are two options available under this selection.

- **Field** – provides AWP Reports by the District, Area and Cost Center, Fiscal Year, and Family or HM Group.
- **District / Region** – provides AWP Reports by the District and Region, Fiscal Year, and Family or HM Group.

Scheduled Reports – There are three options available under this selection.

- **Crew** – provides a Crew Schedule Report for a selected Crew ID and a Date Range.
- **Region / Area** – provides an Area Scheduled Report for a selected District, Region and Area, and Date Range.
- **Roadway** – provides a Scheduled Report for a selected Roadway ID by Date Range.

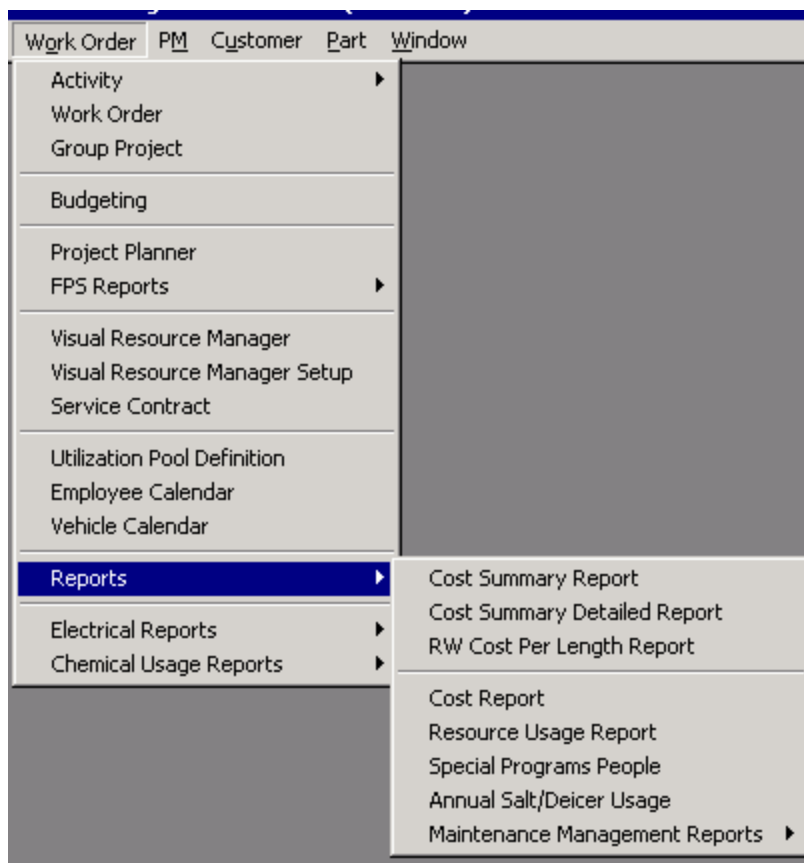
Plan To Actual – There are two options available under this selection.

- **Field** – provides a Planned to Actual Comparison Report by the District, Area and Cost Center, Fiscal Year, and Family or HM Group.
- **District / Region** - provides a Planned to Actual Comparison Report by the District and Region, Fiscal Year, and Family or HM Group.

July 2005

REPORTS AVAILABLE FROM THE WORK ORDER MENU (Continued)

REPORTS



July 2005

REPORTS AVAILABLE FROM THE WORK ORDER MENU (Continued)**Cost Summary Report**

Provides total costs associated with Work Orders for the search criteria selected. Criteria options include:

- Work Order number
- Asset
- Postmiles
- Activity
- Area,
- Crew
- Problem
- Project
- Date Range
- WO Status,
- Search Style
- Subtotal On

Cost Summary Detailed Report

Provides detailed costs associated with Work Orders for the search criteria selected. Criteria options include:

- Labor M
- Material,
- Vehicle
- Work Order number
- Asset
- Postmiles
- Activity
- Area
- Crew
- Problem
- Project
- Date Range
- WO Status
- Search Style
- Subtotal On

Detail items include:

- Labor Vehicle
- Material
- Extra item
- Contractor

July 2005

REPORTS AVAILABLE FROM THE WORK ORDER MENU (Continued)

Cost Summary Detail Sample

The screenshot shows the 'Cost Summary Detailed Report' window. It contains various input fields and checkboxes. Red circles with numbers 1 through 9 are placed over specific fields to indicate where to enter data:

- 1: Work Order #
- 2: Asset (containing 'RW')
- 3: From (containing '0.000 MI')
- 4: Activity
- 5: Crew
- 6: Detail on (checkboxes for Contractor, Labor, Vehicle, Equipment, Material, Extra Item, Tool)
- 7: Charged (containing '/')
- 8: Subtotal on (dropdown menu showing options like None, Activity, Area, Asset Type, Crew, Maint Type, Problem, Project, Daily, Monthly)
- 9: Search Style (dropdown menu showing options like Match, Start, Match, Exact)

1. Enter a Work Order number if you are looking for cost related to a specific Work Order.
2. Enter an asset here. The type of asset selected will determine the selection in the next box to the right. Tab out of the asset box and enter your criteria for a route (RW), Appurtenance, Bridge, Signal etc.
3. If RW is entered in the asset box, you will have "From" and "To" Postmile/Miles to enter. After entering a Roadway ID, right click in that box. A Roadway pop up will come up. Double click or load the roadway you entered. You then can select the Open Form at the top of the page. This will open the Roadway Feature Viewer for that route. From there you can verify postmile prefixes.

Note: Both the Cost Summary and Cost Summary Detail reports prorate expenditures.

4. You may enter a specific Activity or partial Activity for your report.
5. You may select a specific Region in the **Area** box, **Crew** or **Problem** such as ACDNT, ACUNK, DAMAG, or PRJT.

July 2005

REPORTS AVAILABLE FROM THE WORK ORDER MENU (Continued)

Cost Summary Detail Report Sample (continued)

6. This area allows you to add cost details on any of the checked items.
7. Enter a data range for your report.
8. This allows you to apply a subtotal to a selection of your choice.

Set the Search Style to find information that matches or is exactly like your query. Normally you will select MATCH. There are very few situations you would select START as a Search Style.

**Note Start will bring all information within your date range. It will include routes higher than your selection and activities greater than your selection.*

All costs on Cost Summary Report, Cost Summary Detail Report and Cost Report are from expenditures entered into the IMMS system by field supervisors. They include Labor, Vehicle, and Material costs, and with costs entered on the Extra Item tab and the Contractors tab.

There are no outside expenditures included in these reports.

REPORTS AVAILABLE FROM THE WORK ORDER MENU (Continued)

RW Cost Per Length Report

This report provides TOTAL costs for a selected Roadway and Post Miles or Asset, Activity, Crew, Problem Code (where applicable), Date Range, and Work Order Status.

In addition to costs for all Work Orders within the post mile perimeters selected in the report, all Work Orders in which post miles are “partially” within selected range are included by a proration. For example, if one mile of a Work Order with a ten-mile range is within the perimeters of the report request, 1/10th of the costs from that Work Order will be included in the report.

Resource Usage Report *

Provides Maintenance cost reports including TRAMS expenditures for District, Region, Area and/or Cost Center by HM Group, Family, Family Problem, or Activity and Date Range. TRAMS expenditures come into IMMS at the Family/Family Problem level.

** Use to obtain IMMS and TRAMS data together.*

The **Resource Usage Report** and the Maintenance Management Report (MMR) include TRAMS expenditures as well as IMMS expenditures. In the combined IMMS/TRAMS reports, not all information entered into IMMS is included. An example of this is items entered in the Extra Item tab. All Extra Item tab entries are excluded from these reports, as they are included in the TRAMS expenditures. This includes TEC expenses, rental equipment, and other items. IMMS included expenditures in these reports is limited to employee hours, “C” numbered vehicles, and materials purchased within the SVS system. For a detailed explanation of the data in the Resource Usage Report and the MMR see below.


The Resource Usage Report includes IMMS expenditures through the latest system upload. This report is current to within the last day to two days if the supervisor is current with their entries. It also reflects corrections back within a fiscal year to the date of the work and not the date the correction was made.

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REPORTS AVAILABLE FROM THE WORK ORDER MENU (Continued)

Resource Usage Report Sample

FIRST HALF



Caltrans - IMMS

Division of Maintenance

Help Desk,

(866) 774-4667 Fax (916) 323-0341

Resource Usage Report

Report Date

11/10/2004

10:09 AM

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District: 07
Report Period: Fiscal Year 2003/2004
Report Month: June
Family: All
Show Activities: No

ALL FAMILIES - ALL ACTIVITIES

	REPORT MONTH				REPORT PERIOD					
	PY	\$	PRODUCTION UNITS	PY	SUPPORT PY	SPP PY	LABOR \$	VEHICLE \$	MATERIAL \$	TOTAL \$
Region 610	14.1695	1,262,587	165.7049	24 %	159.7200	9,245,508	1,083,086	1,199,979	11,528,523	
Region 640	13.3075	1,234,804	145.0225	21 %	182.5899	8,155,343	976,849	1,131,903	10,264,071	
Region 675	14.9117	975,106	170.7511	17 %	143.9367	9,439,482	932,512	521,564	10,893,549	
Region 710	13.4279	1,041,692	141.0655	25 %	71.9038	7,984,884	850,189	1,292,781	10,127,735	
Region 740	17.7347	1,603,860	194.2822	20 %	0.0000	12,273,402	900,200	2,997,165	16,171,003	
Total	73.5513	6,117,849	816.8263	21 %	558.1504	47,098,619	4,742,836	7,143,392	58,984,881	

The FIRST HALF of the of the Resource Usage Report includes **only IMMS charges**.

**Note: There are no production units at the Family Level. To obtain production units you must query at the Activity level.*

July 2005

SECOND HALF

ALL FAMILIES - OTHER EXPENDITURES AND REIMBURSEMENTS												
REPORT PERIOD (in dollars)												
	MAJOR MAINT	RECOVERIES	ABATEMENTS	WORK BY OTHERS	SERVICE CONTRACT	UTILITY	TRAVEL	EQUIP RENTAL	OTHER LABOR	OTHER VEHICLES	MISC	TOTAL
Region 601	0	(142)	(2,189,703)	2,737,741	0	12,137	56,425	83,605	7,134,866	0	9,001,065	16,835,994
Region 610	0	0	6,529	0	0	3,258,234	40,980	69,872	939,052	10,504	3,784,222	8,109,393
Region 640	0	0	46,400	0	0	1,674,167	28,764	31,489	773,174	3,125	2,832,327	5,389,446
Region 675	0	0	(1,220)	0	0	1,887,796	52,333	5,889	839,583	13,774	2,918,992	5,717,137
Region 710	0	0	(564)	0	25,357	1,156,035	38,238	10,423	973,459	18,476	2,804,248	5,025,672
Region 740	0	0	(13,284)	0	0	5,038,185	181,624	46,296	1,230,461	10,499	4,177,344	10,671,125
Region 999	0	(320,899)	(8,015)	15,065	441	18,559	6,965	0	3,512,449	2,978,006	11,414,498	17,817,269
Total	0	(320,841)	(2,159,857)	2,752,806	25,798	13,045,103	405,329	247,574	15,403,044	3,034,384	36,932,696	69,366,036
All Families Grand Total												128,350,917

Below is a description of the expenditure details from the SECOND HALF of a Resource Usage Report. This page is where **TRAMS expenditures** are incorporated into IMMS reports.

- Major Maintenance – Major Maintenance expenditures are the only data on page 2 that does not come directly from the TRAMS interface and are entered separately.
- Recoveries – Recoveries – Caltrans, overhead recoveries – reimbursement work, and recoveries and income – general.
- Abatements – Damage recoveries and miscellaneous abatements.
- Work By Others – Maintenance work performed by other agencies such as city/county agreements.
- Service Contracts – This only includes contract work by consultants and professional services.
Note: Service contracts with sheltered workshops, CCC, and janitorial services are reported under MISC. expenditures.
- Utility – Utility services for Maintenance offices.
- Travel – In and out of State travel, commercial air, private auto, **non**-Caltrans State vehicle use, per diem, overtime meals, and call back mileage.
- Equip Rental – Maintenance equipment rental.
- Other Labor – All other Caltrans labor not entered through IMMS.
- Other Vehicles – Depreciation, car tags, insurance cost, and fuel cost.
- Misc - All other Non-IMMS expenditures are reflected here.
Note: Vehicle costs not charged in IMMS are reflected here in the W Family.
Material Costs not charged in IMMS are reflected here in the T Family.

REPORTS AVAILABLE FROM THE WORK ORDER MENU (Continued)**Special Programs People**

Provides a statewide summary of maintenance cost for Special Programs People. Selections include: Fiscal Year, SPP Type, District, District & Region, and Family. This report replaces the MMS Annual Special Programs People Report.

Maintenance Management Report (MMR)

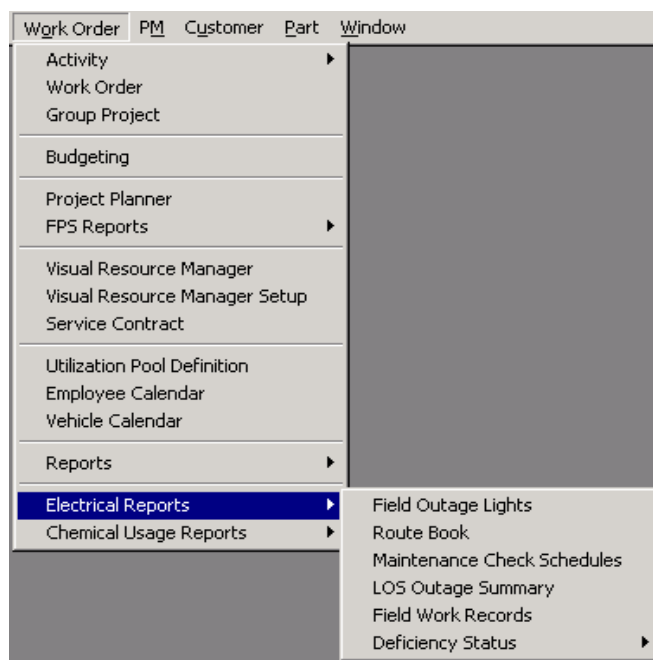
In the MMR report, the format is similar, and the TRAMS data (Other Expenditures and Reimbursements) is identical to the RESOURCE USAGE REPORT. The difference in these reports are in the contents of the IMMS entered expenditures and the increased detail/breakdown by District, Region, Area, and Cost Center.

The main difference between the Resource Usage and MMR is that the MMR locks down expenditures each month. This means that when a month closes and the report is created, any corrections or changes after that time are recorded by the date the corrections/changes are made and not the date the actual work occurred.

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REPORTS AVAILABLE FROM THE WORK ORDER MENU (Continued)

ELECTRICAL



Field Outage Lights - Lists outages in order of route and post mile.

ROUTE BOOK

Maintenance Check Schedules - Lists the Preventive Maintenance Checks that are scheduled and not yet completed, grouped by route (Group Project), which includes Route ID, Post Miles, Description, Work Order number, Group Project number, Interval, and the Due Date.

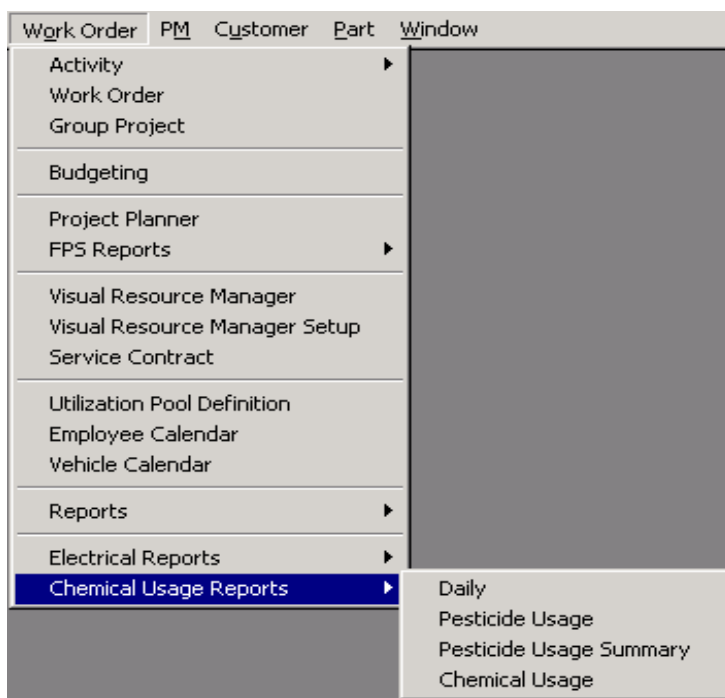
LOS Outage Summary - For a district, lists the total number of Highway Light Assets and how many are out; and the total number of Sign Light Assets and how many are out.

FIELD WORK RECORDS

Signal Deficiency Status Report - For a District, lists by Cost Center, the Signals, Masters, and Flashers, total number of Preventive Maintenance Checks scheduled for the specified Date Range with the amount Due and Deficient.

TOS Deficiency Status Report - For a District, lists by Cost Center the Meters, CMS, and CCTV total number of Preventive Maintenance Checks schedule for the specified Date Range with the amount Due and Deficient.

REPORTS AVAILABLE FROM THE WORK ORDER MENU (Continued)

CHEMICAL USAGE

Chemical/Pesticide reports fall into two categories. They are as follows:

- **Chemical**
- **Pesticide**

Chemical reports track all SVS materials listed as CHEM by Cost Center. The data for this comes from the supervisor's daily entry of material use. This data updates daily and the report is accurate up to the previous day.

Pesticide reports track specific materials that must be reported to the Department of Pesticide Regulation (DPR). It totals material by County/Route. It includes any cost center that applied the appropriate material within a county/route. This includes the possibility of other districts that overlap into a county/route. This reports updates once a week to allow for corrections or possible changes. The weekly reports are then merged to create the monthly report that is sent to DPR.

REPORTS AVAILABLE FROM THE WORK ORDER MENU (Continued)

The following are the various Chemical/Pesticide Reports:

Daily Chemical Usage Report - Details chemical usage on each Work Order for a specified District, Crew, and Date Range. This report includes all Work Order information including:

- Labor for employee by hours and safety device usage.
- Vehicles by hours.
- Material
- All data entered on the Additional tab including Applicator number, Weather, GPA etc.

Chemical Usage Report – Total chemical use by Unit of Use and A.I. for a Cost Center for a specified Date Range.

Pesticide Usage Summary Report – Totals for all material combined. Summarizes pesticide use by County and Date Range.

Pesticide Usage Report – Totals for each material by quantity and A.I. for a select Date Range. Summarizes use by County. This report is sent to Department of Pesticide Regulations monthly.

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8.4 PARTS MENU

From the Parts Menu there are several reports and Look-Ups to choose from. Some of the available reports are not used by Caltrans at this time. The following is a list of reports on the Parts Menu:

Stock Information – Look Up that provides stock information for a selected Stock Area. This can provide a list of all Parts for a Stock Area.

Stock Transactions - Has seven options. The first provides a report and the last six are Look-Ups.

- a. **Transactions Listings** – provides a report of all transaction for a selected Stock Area on all Parts or a selected Part.
- b. **Parts Lookups** – the following are Parts look ups that provide printable information for a selected Stock Area and or Part:
 - Adjustment Transactions
 - Issue Transactions
 - Receipt Transactions
 - Reserve Transactions
 - Return Transactions
 - Transfer Transactions

Stock Audit Report

*NOTE: THIS REPORT IS CURRENTLY NOT BEING UTILIZED BY CALTRANS.

Parts Catalog - Shows a list of all Parts, or details on a selected part including description, areas that have the Part, and chemical information.

Serial/Lot Number Report

*NOTE: THIS REPORT IS CURRENTLY NOT BEING UTILIZED BY CALTRANS.

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8.5 EMPLOYEE AND DAILY TIME REPORTS

These reports are found on the **File Menu** under **Resources**.

Daily Time Report – provides the labor cost records by District, Region, and Cost Center for a specified Fiscal Year, Month, or Date Range.

Time Comparison Report – provides by District, Region, Area, and Cost Center a comparison of employee labor charges for a selected Date Range.

Overtime Usage Report – provides overtime usage by District, Region, and Cost Center for a selected Fiscal Year, Month, or Date Range.

PI Employee Usage Report – provided PI usage by District, Region, and Cost Center for a selected Fiscal Year, Month, or Date Range.

IMMS/TOPSS Correction Report - Summarizes by District and Region any errors that were generated when IMMS interfaced with TOPSS.

Night Crew Time Bank – provides a comparison report of scheduled hours and charged hours for night crews.

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8.6 DAMAGE AND ACCIDENT REPORTS

The following reports can be found under the **Accident** menu on the **Damage Claim Reports** option.

Accident Log Status – provides a list of all accident logs for a District, Region or Cost Center by Date Range. Includes Accident Date, Resolution Date, Validated Date, Accident number, Service Request number, Spill/Damage, Amount Billed, and Amount Collected.

Maintenance Cost – provides maintenance cost for a specific Accident Log.

Validated Accident Log - provides a listing by District of validated Accident Logs for a Date Range. Includes Accident Log number, Accident Date, Work Order number, Service Request number, Validated Date, and Validated By. A feature with most Lookup reports is that from the report you can easily access each individual record (Work Order, Accident Log, Service Request, etc.).

This report also includes the option to list all **Not Validated** Accident Reports. The Not Validated option is a good tool for all levels to monitor Accident Log status and insure Accident Logs are validated as soon as possible so the billing process started in a timely manner. The example below is an Accident Log Lookup for Not Validated Accident Reports.

Accident Log Lookup

Accident # [] To [07/01/2004] To [11/01/2004]
Type [] Validated [] Not Validated []
Address []
Area [] Sub-area [] District [02] Loc []
Location [] Contains []

Accident Log Search Criteria

Accident Number	Address	City	Accident Type	Date
14800			SPILL	07/09/2004
14989			SPILL	07/21/2004
15062			DAMAGE	07/26/2004
15119			DAMAGE	07/08/2004
15126			SPILL	07/30/2004
15127			SPILL	07/30/2004
15270				
15277				
15323				
15324				
15325				
15326				
15550				
15551				
15552				

Accident Log Entry

Accident # [15062] [07/26/2004] : Accident Type [DAMAGE] Source []

Weather Condition [] Vehicle Count [0]
Road Condition [] Person Count [0]
Light Condition [] Fatality Count [0]
Road Character [] Injury Count [0]
Service # [197809] Validated By [] on [] / [] / []

General Location Vehicle/Driver Persons Events Comments Additional Info

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8.7 VEGCON REPORTS

The following reports are found under the **Asset Menu** on the **VEGCON Reports** option.

Vegetation Control Plan Report - Provides detailed information about a specific Vegetation Control Plan.

VEGCON – Material List – Provides a detailed report on materials by District, Region, Area, Cost Center, County, and Route.

VEGCON – Sensitive Area Report – Provides a detailed report on sensitive areas by District, Region, Area, Cost Center, and/or County.

8.8 HAZMAT REPORTS

The following reports are found under the **Customer Menu** on the **Hazmat Reports** option.

Spill Reports – provides spill report information by District, Date Range, Hazard Class, County, Route, and Miles To/Miles From.

Spilled Substance Report - Provides detailed information about a specific spill based on the Service Request number by selected Date Range. Can provide all Spilled Substance Reports for a selected District and Date Range.

Incomplete Spill Package – provides a list by District and Region of incomplete Spill Packages assigned by Service Request.

8.9 MONITORING

GENERAL INFORMATION

The monitoring of maintenance activities and resource expenditures requires effective coordination between the districts and Headquarters to ensure compliance with applicable regulations, policies, and procedures. This chapter outlines and describes individual monitoring responsibilities, as well as an overview of necessary steps to be undertaken to ensure effective management of Maintenance Division resources.

MAINTENANCE EXPENDITURE MONITORING AND CONTROL

General

The Maintenance Division budget allocation, and the resulting annual work plans, represent services and maintenance activities approved by departmental management and the Legislature. These services and activities are translated into resource requirements from predicted workload and work standards in the budget development process and are expressed in person years and dollars in the Legislative Budget. Consequently, the comparison of person year expenditures versus approved spending plan is the tool used to monitor work accomplishment.

Monitoring maintenance work accomplishment, in terms of resources expended, is required to ensure that the Maintenance Division is managed and implemented as directed by the Legislature through budget allocation. Field monitoring by Headquarters is also used to assure that Maintenance Division resources are expended according to policies, guidelines, and approved spending plans.

The budget allocation represents needed work that was identified one to two years before the working fiscal year. Conditions, policies, and external regulations can change and alter our maintenance needs, between identification and implementation (abnormal snowfall, storm damage, drought, Cal-OSHA regulations, etc.). The intent of these procedures is to accomplish needed work to the extent feasible within legal constraints, employing budget allotment and spending plan adjustment when necessary and possible. It is not intended that resources be expended for unnecessary work just because the resources are available.

It should be evident that effective monitoring is contingent on realistic spending plans and accurate expenditure reporting. The cyclical process (from needs to budget to spending plan to expenditure monitoring to needs, etc.) will provide opportunities to improve currently existing programs and management processes.

MONITORING (Continued)

The Office of Special Studies has Integrated Maintenance Management System (IMMS) reports available for monitoring expenditures by district, region, area, and cost center. IMMS allows managers at all levels, district and Headquarters, to view and print real time reports. Specialized reports (IMMS Resource Usage and IMMS Maintenance Management) are available for specific information.

With the IMMS, managers now have the ability to monitor various processes, including damage reporting, Service Requests, and HAZMAT.

Procedures

Each month, the Maintenance Region Managers, along with their Area Superintendents will review the expenditures to date, and compare these to the IMMS Plan established for the fiscal year. Based on this review, work schedules should be adjusted as conditions permit to accomplish the approved plan.

It is important that districts not overrun their annual Maintenance budget allocation, which is distributed by budget "Category". Family Y (Work for Others) funds cannot be used for Maintenance, HM Program work.

Managers and Area Superintendents should periodically review other reporting requirements now recorded in IMMS, including damage reporting (Accident Logs), to insure reporting is accurate, billing for third party damage is completed in a timely manner, and dollars are recovered from responsible parties.

Corrective Action

If the projections indicate the fiscal year total for a budget Category will be exceeded, either immediate corrective action must be taken by the district to get back on target, or if redirection of effort is indicated, prior approval is required by the Chief, Division of Maintenance. If the variance is justified, it will be considered in recommendations for future district budgets. If the variance has statewide application, it may lead to a Level of Service policy change by the Chief, Division of Maintenance.

If the district recommends a change in the approved annual spending plan, the recommendation must state the specific changes (+ or -), and which Categories transferred to and from. An explanation is required, including the effect of the change(s) on Maintenance Levels of Service.

Districts shall not overrun their annual Maintenance allocation without concurrence of the Chief, Division of Maintenance and prior approval from the Budgets Division Chief.

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MONITORING (Continued)

RESPONSIBILITY FOR MONITORING AND CONTROLLING MAINTENANCE EXPENDITURES

General

Monitoring and controlling Maintenance expenditures are important functions in the Maintenance Management process. The responsibility for these functions involves managers in the district, the Headquarters Maintenance Division, and the Budgets Division. Individual responsibilities and the interactions among the various managers are defined herein.

Headquarters Maintenance Division responsibilities

Chief, Division of Maintenance

The Chief, Division of Maintenance is responsible for functional management of the HM Program. The Chief, Division of Maintenance establishes the direction, definition and objectives of the Program. He/She also determines the program workload and resource allocations to administer the Program

Maintenance Division Office Chiefs

Each Office Chief has overall responsibility and is designated Program Advisor for Maintenance Program Families assigned to his/her office (See Maintenance Manual Volume One, Section 1.02, Figure 1.1). From a Program Management perspective, the Office Chief has the following responsibilities:

- Establishing policies, procedures, and standards for assigned programs.
- Establishing corrective actions to bring districts into compliance where necessary.

In a Program Advisory capacity, the Office Chief has the following responsibilities:

- Determining and defining Levels of Service.
- Field compliance reviews concerning Levels of Service, use of proper methods and materials, and conformance with current Maintenance Program policies and procedures.
- Recommending policies, procedures, and standards.
- Providing technical assistance and special expertise to districts.
- Recommending approval of the districts' annual work plans.
- Monitoring district spending plan accomplishments.

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MONITORING (Continued)

District Liaisons

Each Maintenance District Liaison has overall responsibility for monitoring the Level of Service review to assure statewide consistency.

CHAPTER NINE

IMMS ASSET INVENTORY

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9.3	ELEMENT INSTRUCTIONS
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9.5	ATTRIBUTE INSTRUCTIONS
9.6	ASSET INSTRUCTIONS
9.7	LANES AND SHOULDERS INSTRUCTIONS
9.8	APPURTENANCE INSTRUCTIONS

INTRODUCTION

This chapter addresses the Physical Highway Inventory for the Division of Maintenance. It is made up of various Integrated Maintenance Management System (IMMS) Assets, Appurtenances and Elements. The inventory is an itemized list of current assets tracked by the HQ Budget Office for use in the Budget Model. For Maintenance purposes, this is the physical count of assets that are in the field on a particular route. The inventory is subject to change throughout the year. These changes are recorded in the IMMS.

Maintaining accurate real time inventory is imperative. By recording the increases in the inventory throughout the year we give our HQ Budget Office the pertinent data needed for them to request additional funds for the department. They request these funds on a yearly basis through the Budget Change Proposal (BCP) process.

9.1 BASIC GUIDELINES

There are four different categories that are inventoried in the IMMS system. They are Attributes, Assets, Lanes, and Elements. It is the responsibility of the Maintenance Supervisor to count and record the Element information. The District IMMS Coordinator is required to input the Element information into IMMS and is required to submit all other inventory updates to HQ IMMS. Headquarters IMMS is responsible for the timely updating of this information. If you encounter any problems collecting the information contact your District IMMS Coordinator.

9.2 ROLES AND RESPONSIBILITIES

MAINTENANCE SUPERVISOR

It is the sole responsibility of the maintenance Supervisor who maintains the highway element to count their inventory, record and report his/her findings to the District IMMS Coordinator. This process should be done as new elements are added or removed from the system. The elements must be recorded by the supervisor and submitted to the District IMMS Coordinator by the end of November in order to be reflected in the Budget Model for the upcoming year.

MAINTENANCE AREA SUPERINTENDENT

It is the Superintendent's responsibility to spot check the Supervisors findings and to validate the amounts being added or subtracted from the system. They must also insure that this process happens in a timely manner. They are responsible to see that updates are being made as new elements are added and that values are current by the end of each November.

REGION MANAGER

Region Managers should periodically review the Physical Highway Inventory Reports, particularly when there is an indication that instructions in this manual are not being followed, or reports do not reflect the objectives of fiscal goals, IMMS requirements, or Departmental policies. Managers can also monitor by viewing real time reporting in IMMS. Feedback on their findings should be communicated to Maintenance Area Superintendents to resolve.

DISTRICT IMMS COORDINATOR

The IMMS Coordinator is responsible for inputting all of the element information into IMMS. It is also the IMMS Coordinator's responsibility to collect and document all non element information and forward this information to Headquarters Office of Management Systems & Studies, (OMSS) for data entry into IMMS. Under no circumstances shall the IMMS Coordinator input any data other than element inventory into the IMMS system. It is the sole responsibility of HQ to input all other inventory assets into IMMS. The District IMMS Coordinator will provide Headquarters with the information needed to update Assets, Appurtenances and Lanes within IMMS.

HEADQUARTERS OFFICE OF MANAGEMENT SYSTEMS & STUDIES

The Office of Management Systems and Studies (OMSS) is responsible for the IMMS system and for monitoring and reporting changes to the element counts within IMMS. OMSS will review changes monthly. OMSS will also perform spot checks of district inventory counts to validate the process. All changes to Assets, Appurtenances and Lanes in IMMS will be made by OMSS using data provided by the District IMMS Coordinator.

9.3 ELEMENT INSTRUCTIONS

The Supervisor responsible for performing the maintenance on the following elements is tasked with maintaining an accurate inventory count of the elements. The supervisor is required to notify their District IMMS Coordinator of changes in their inventory counts. It is the IMMS Coordinators responsibility to update the element information in IMMS.

The elements are counted on an even Post Mile to Post Mile basis whenever possible. If from Post Mile 8.000 to Post Mile 9.000 the Supervisor has a count of 15 single post signs located within that post mile range the supervisor will log that there are 15 signs located between Post Mile 8.000 and Post Mile 9.000. It is important to log the prefix of the roadway section that the supervisor is inventorying. Both the "From Post Mile" and the "To Post Mile" must have the same prefix for any inventory entry. If Post Mile 10.000 has a prefix of RPM and Post mile 11.000 has a Post Mile of PM the Supervisor will not be able to inventory this section in a Post Mile to Post Mile fashion. They will need to divide the area into two sections and will need to make two entries for this area. One entry will be for the RPM section and one entry for the PM section. This will require the Supervisor to locate the exact Post Mile where the PM and the RPM meet. This will be the location that the first inventory section will end and the second section will start.

The following information must be collected when recording the element. Roadway ID, Element Type, Element Value/Count, Prefix, From Post Mile and To Post Mile. When the information is input into IMMS the old inventory data should not be updated. The old record should be expired and the new data added as a new entry. By doing this we can maintain records of historical inventory changes. The only time an entry should be "Updated" is when a Value/Count error occurs during the process of creating a new entry. That entry should be updated with the correct information and not "expired".

Example 1: You count signs and find 12 one post signs on Highway 99 in Sacramento County from Post Mile 4.000 to Post Mile 5.000. This is how it should be recorded.

Roadway ID	Element Type	Element Value	Prefix	From Post Mile	To Post Mile
03-SAC-099	M410	12	PM	4.000	5.000

Example 2: You count signs and find the post mile prefix changes during the mile segment. Record a count from the beginning post mile prefix to the point of change and create another entry for the count in the segment after the prefix change. If 03-SAC-099 changes from PM to RPM at PM 4.402 and there are 5 signs up to the prefix change the supervisor would create a line entry for the first segment. The post mile at the realignment is RPM 4.315. There are 7 signs in this segment. Create a second entry for these signs. The following records would be created:

Roadway ID	Element Type	Element Value	Prefix	From Post Mile	To Post Mile
03-SAC-099	M410	5	PM	4.000	4.402
03-SAC-099	M410	7	RPM	4.315	5.000

The following pages contain the list of Elements that the supervisors are responsible for maintaining the current count. Again the supervisor who is responsible for maintaining that Element is responsible for updating the Inventory counts.

9.4 ELEMENT OF INVENTORY, DESCRIPTIONS & UNIT OF MEASURE

C720	HORIZONTAL DRAINS	EACH OUTLET
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20
21	21	21
22	22	22
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24	24	24
25	25	25
26	26	26
27	27	27
28	28	28
29	29	29
30	30	30
31	31	31
32	32	32
33	33	33
34	34	34
35	35	35
36	36	36
37	37	37
38	38	38
39	39	39
40	40	40
41	41	41
42	42	42
43	43	43
44	44	44
45	45	45
46	46	46
47	47	47
48	48	48
49	49	49
50	50	50
51	51	51
52	52	52
53	53	53
54	54	54
55	55	55
56	56	56
57	57	57
58	58	58
59	59	59
60	60	60
61	61	61
62	62	62
63	63	63
64	64	64
65	65	65
66	66	66
67	67	67
68	68	68
69	69	69
70	70	70
71	71	71
72	72	72
73	73	73
74	74	74
75	75	75
76	76	76
77	77	77
78	78	78
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80	80	80
81	81	81
82	82	82
83	83	83
84	84	84
85	85	85
86	86	86
87	87	87
88	88	88
89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

Horizontal drains (hydrauger type) will be inventoried under this item. The diameter of the horizontal drain pipe is immaterial. However, in the majority of cases, they will be constructed of 2 inch diameter pipe. The count will be each outlet from a hole drilled in an embankment that is open to the atmosphere or feeding into a collector system.

C721	SLOTTED DRAINS OR PAVEMENT STRUCTURAL DRAINS	LINEAR MILES (HUND'TH) .01

These types of drains are used to remove surface or subsurface water from the highway (usually Freeway) section.

Slotted drains may have 6 or 8 inch diameter pipe below the pavement surface to drain water into a culvert.

Pavement/structural drains are below the pavement surface and are placed to drain subsurface water. These drains are generally 1-1/2 to 2 inches in diameter.

C920	CURBS AND DIKES PCC, ASPHALT OR STONE	LINEAR MILES (HUND'THS .01)
------	--	-----------------------------

All types of curbs and dikes constructed of Portland Cement Concrete, stone or asphalt of any size or shape will be inventoried under this item. Curbs on bridges are not to be inventoried in this item. Regardless of location in either a flexible or a rigid pavement system, **all** curb and dike mileage will be inventoried here.

C930	SIDEWALKS	LINEAR MILES (HUND'THS .01)
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20
21	21	21
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36	36	36
37	37	37
38	38	38
39	39	39
40	40	40
41	41	41
42	42	42
43	43	43
44	44	44
45	45	45
46	46	46
47	47	47
48	48	48
49	49	49
50	50	50
51	51	51
52	52	52
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91	91	91
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98	98	98
99	99	99
100	100	100

All sidewalks for pedestrian use, constructed with any type of paved surface and any width are included in this item; also include wood sidewalks in this inventory item. Do not include sidewalks on bridges. If there is a curb or dike adjacent to the sidewalk the curb or dike is to be inventoried as a separate inventory item under the inventory item number C920.

C940	SOUNDWALLS	LINEAR MILES (HUND'THS .01)
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20
21	21	21
22	22	22
23	23	23
24	24	24
25	25	25
26	26	26
27	27	27
28	28	28
29	29	29
30	30	30
31	31	31
32	32	32
33	33	33
34	34	34
35	35	35
36	36	36
37	37	37
38	38	38
39	39	39
40	40	40
41	41	41
42	42	42
43	43	43
44	44	44
45	45	45
46	46	46
47	47	47
48	48	48
49	49	49
50	50	50
51	51	51
52	52	52
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54	54	54
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58	58	58
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62	62	62
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64	64	64
65	65	65
66	66	66
67	67	67
68	68	68
69	69	69
70	70	70
71	71	71
72	72	72
73	73	73
74	74	74
75	75	75
76	76	76
77	77	77
78	78	78
79	79	79
80	80	80
81	81	81
82	82	82
83	83	83
84	84	84
85	85	85
86	86	86
87	87	87
88	88	88
89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

All soundwalls constructed of any type of material, such as concrete, block wall, metal, etc., shall be inventoried under this item number. If soundwalls are constructed on top of PCC barrier walls, such as California type, the barrier is to be inventoried as a separate inventory item under the inventory item number M714. Do not include earth dikes constructed for the purpose of a sound barrier. These barriers are not inventoried.

9.4 ELEMENT OF INVENTORY, DESCRIPTIONS & UNIT OF MEASURE

C950	BICYCLE PATHS	LINEAR MILES (HUND'THS .01)
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
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87	87	87
88	88	88
89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

This item includes all bicycle paths which are maintained at State expense. Do not include any bicycle paths that are also a shoulder, and inventoried as a shoulder or bicycle paths on bridges.

E330	BACK FLOW PREVENTERS	EACH
------	----------------------	------

Includes all types of back flow preventers used in water systems.

E410	TOTAL IRRIGATED LANDSCAPE ACRES	ACRES (HUND'THS .01)
------	---------------------------------	----------------------

This includes all of the landscaped acres which are being watered by an irrigation system. Do not include areas that were irrigated during the initial plant establishment period and that the irrigation system is now abandoned. In the case of linear plantings this would include the area from unimproved shoulder edge to fence line for the length of the linear planting. In the case of random planting of trees or shrubs in a quadrant this would include the total acres of landscaping and the other vegetation which must be maintained to enhance or protect the landscaping within that quadrant. Do not include hardscaping, asphalt or PCC surfaced areas.

E420	TOTAL NON-IRRIGATED LANDSCAPE ACRES	ACRES (HUND'THS .01)
------	-------------------------------------	----------------------

This includes all of the landscaped acres and surrounding acres which are not being watered by an irrigation system. This would include areas where the irrigation system is now abandoned but the landscape is being maintained such as functional landscaping. This acreage would include all acres which must be maintained at a higher level in order to be compatible with the landscape design. This includes open areas of vegetation requiring growth control to enhance or protect the landscape design. It also includes hardscaping and decorative rock areas within a landscape area. In the case of linear plantings this would include the area from unimproved shoulder edge to fence line for the length of the linear planting. In the case of random planting of trees or shrubs in a quadrant this would include the total acres of landscaping and the other vegetation which must be maintained to enhance or protect the landscaping within that quadrant. Do not include asphalt or PCC surfaced areas.

M116	STRIPING, PAINT	LINEAR MILES (HUND'THS .01)
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Included in this inventory are all PAINTED Striping. This item is the total linear miles of the striping.

M126	STRIPING, PLASTIC	LINEAR MILES (HUND'THS .01)
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Included in this inventory are all PLASTIC Striping. This item is the total linear miles of the striping.

9.4 ELEMENT OF INVENTORY, DESCRIPTIONS & UNIT OF MEASURE

M211 PAVEMENT MARKINGS, PAINT EACH INSTALLATION

Included in this inventory are all PAINTED pavement markings. When inventorying highway markings which we maintain on local roads use the post mile of the intersection of the local road. An installation is considered to be a complete stencil group. An example would be if a marking has many letters making up a single word such as STOP or SIGNAL it would be counted as one installation. Stop bars count as one installation regardless of their length.

M221 PAVEMENT MARKINGS, PLASTIC EACH INSTALLATION

Included in this inventory are all PLASTIC pavement markings. When inventorying highway markings which we maintain on local roads use the post mile of the intersection of the local road. An installation is considered to be a complete stencil group. An example would be if a marking has many letters making up a single word such as STOP or SIGNAL it would be counted as one installation. Stop bars count as one installation regardless of their length.

M311 RAISED MARKERS LINEAR MILES (HUND'THS .01)

Markers are measured by the total miles of marker pattern in the inventory section. If the section is one mile long and you have two lines which contain a marker pattern you have two miles of markers in that section.

M321 RECESSED MARKERS LINEAR MILES (HUND'THS .01)

Included in this inventory are all recessed type markers. These markers are usually found in snow removal areas. Markers are measured by the total miles of dot patterns in the inventory section. If the section is one mile long and you have two lines which contain a marker pattern you have two miles of markers in that section.

M410 SIGNS, ONE POST SUPPORT EACH SIGN

Any sign regardless of size that would normally require only one 4 x 4 or 4 x 6 inch wood post for support will be inventoried under this item. These signs may be installed in the roadside, median, or gore. The post may also be steel, aluminum, etc. The sign may also be mounted on any type of support, other than a post, such as a light or signal standard, mast arm, bridge abutment, or other supporting object. One post signs may include "Minor Roadside Signs", as shown in the Standard Plans. A one post sign does not include large signs mounted on a large single post steel supported structure such as a butterfly or cantilevered installation. Each sign will be counted. For example, if there are five signs on one support, the count will be five. Exceptions to this will be when "logos" are placed on a sign panel, do not inventory each "logo", only the panel. Exclude all types of Chain and Ice regulatory or advisory control signs. These signs will be counted under element code R330. When conducting inventory on signs that Caltrans maintains on local roads, use the post mile of the intersection of the local road.

9.4 ELEMENT OF INVENTORY, DESCRIPTIONS & UNIT OF MEASURE

M411 SIGNS, TWO POST SUPPORT EACH SIGN

Any roadside signs that would normally require two or more posts for support will be inventoried in this item. These signs may be mounted on 8 inch plus diameter poles, 4 x 4 or 4 x 6 inch posts, or similar supports. These signs may be installed in the roadside, median, or gore. The criterion that applies to one post signs also applies to the two post signs, i.e., 5 signs on two supports is 5 signs. The signs may or may not be illuminated. Exclude all electrically operated changeable message signs. Exceptions to this will be when "logos" are placed on a sign panel, do not inventory each "logo", only the panel. When conducting inventory on signs which we maintain on local roads, use the post mile of the intersection of the local road.

M412 SIGNS, LARGE OVERHEAD EACH SIGN

Large signs are defined as those signs not included under the one post or two post category. Large signs generally are on a structure that allows a clearance over the traveled way of 17 plus feet. Structures may be a sign bridge, a large cantilevered type structure, or a butterfly type structure. Large signs may also be mounted on the face of a bridge or over a crossing. The signs may or may not be illuminated. This is where you inventory the signs themselves. On a bridge structure, count each complete sign as 1. Do not count the panels as separate signs. Smaller signs which may be mounted on the post and would normally only require a single 4x4 or 4x6 post should not be counted here. They are inventoried under the inventory item number M410.

M420 SIGN STRUCTURES, ONE POST, OVERHEAD EACH STRUCTURE

Sign structures using a single steel post for support of a butterfly or cantilevered type covered or open metal truss, or box beam for the sign mount will be inventoried in this item. The signs on a structure are not inventoried here. This item is for inventorying the structure itself. The signs which are mounted on the structure are inventoried under the inventory item number M412.

M421 SIGN STRUCTURES, TWO OR MORE POSTS EACH STRUCTURE

All sign bridges utilizing a covered or open metal truss, or box beam for the sign support will be inventoried in this item. The sign bridge may be cantilevered on one or both ends. Do not confuse this with inventory item with M422 which is a structure that has no post and is attached to the side of a bridge, over crossing, tunnel portal, etc. This item is for inventorying the structure itself. Do not count each post. The bridge structure and both support posts are considered to be one complete unit and counted as one inventory item. The signs on a structure are not inventoried here. The signs which are mounted on the structure are inventoried under the inventory item number M412.

9.4 ELEMENT OF INVENTORY, DESCRIPTIONS & UNIT OF MEASURE

M422 SIGN STRUCTURES, BRIDGE MOUNTED EACH STRUCTURE

All large sign mounted frames that are attached to a bridge, overcrossing, tunnel portal, or similar objects will be inventoried here. Each frame may support more than one large sign. This inventory item does not include any special frames that may be attached to any one or two post sign structures. The signs on a structure are not inventoried here. The signs which are mounted on the structure are inventoried under the inventory item number M412.

When inventorying signs which we maintain on local roads that direct traffic to freeways, use the post mile of the freeway entrance to which the sign directs.

M610 GUARDRAIL CURRENT STANDARDS LINEAR MILES (HUND'THS .01)

This item includes all current standard guardrails. The type of rail does not matter. Inventory the total length of rail. If there is a guardrail in the median that is not placed as a median barrier it will be inventoried here.

M620 GUARDRAIL NON-CURRENT STANDARDS LINEAR MILES (HUND'THS .01)

All guardrail not in the current Standard Plans is to be inventoried under this item. The guardrail may be constructed of wood, metal, cable, or any other material.

M714 BARRIER, PCC LINEAR MILES (HUND'THS .01)

All PCC barrier constructed for any purpose and placed anywhere within the right of way will be inventoried under this item. Include rock walls used as a barrier. This barrier may be with or without light screen. Do not include bridge rail constructed to the same dimensions as a PCC barrier except where it is a continuous part of the PCC Barrier. If a soundwall is constructed on top of the PCC barrier, inventory the PCC barrier and the soundwall as two separate inventory items. The soundwall will be inventoried under the inventory element number C940.

M724 BARRIER, METAL LINEAR MILES (HUND'THS .01)

All metal barrier rail that has been constructed anywhere within the right of way will be inventoried under this item. This rail normally will be constructed in the median, but may also be constructed in other places such as the right hand shoulder between the state highway and a frontage road. Metal barrier may be single or double sided. If the barrier is double sided, you should inventory by the length of rail once for each side.

M814 ATTENUATOR, ALL EACH INSTALLATION

All Attenuator's constructed of any material or design. An entire array of sand barrels is one installation.

9.4 ELEMENT OF INVENTORY, DESCRIPTIONS & UNIT OF MEASURE

R110	SNOW REMOVAL AREAS	LANE MILES (HUND'THS .01)
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All highways that require snow removal annually shall be included in this inventory item. Lower elevation roads with snow storms happening only occasionally (like once every two years) shall not be included.

R120	SNOW REMOVAL SPRING OPENINGS	LANE MILES (HUND'THS .01)
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The number of lane miles that are normally closed to traffic after the first storm for the winter and not reopened until spring are inventoried in this item. The criteria is that the highway is subject to complete winter closure. Snow depth is immaterial.

R210	FROST AND ICE CONTROL	LANE MILES (HUND'THS .01)
------	-----------------------	---------------------------

All highways that require frost and ice control by chemical and/or sanding applications will be included in this item. This would include all snow removal highways, plus other highways subject to annual icing conditions. Bridge decks at lower elevations subject to icing should also be included in the lane miles.

R320	SNOW FENCE	LINEAR FEET
------	------------	-------------

All snow fence of any type or construction will be inventoried as R320. The fence must be installed for snow drift control. All other fence shall be inventoried as C410 or C411.

R330	CHAIN AND ICE SNOW SIGNS	EACH SIGN
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All chain or ice regulatory or advisory signs of any type will be inventoried under this item. The sign must be for the purpose of regulating or advising regarding chain, snow, or ice conditions. Excluded are all electrical controlled changeable message signs and temporary no parking signs.

9.5 ATTRIBUTES

There are many Attributes presently in the system and more are added on an ongoing basis. Attributes consist of items such as county, roadway surface, Mile/Post Mile references, VEGCON and terrain. These attributes are recorded in the Roadway Feature Viewer of IMMS. When adding an Attribute to an IMMS Roadway the following information is required: Roadway ID, Attribute Type, Attribute Value, Starting Post Mile including the Prefix, Ending Post Mile including the Prefix and Add/Update/Delete information.

Example: for changing a north bound section of Route 099 in Sacramento County from RPM 3.232 to RPM 6.748 from PCC to Asphalt as a result of an overlay job the following information would be needed.

Roadway ID	Attribute Type	Attribute Value	From Post Mile	Prefix	To Post Mile	Prefix	Add/Update/Expire
03-SAC-099	North Surf	AC	3.323	RPM	6.748	RPM	Update

To add or remove lineage to a roadway you will need to provide the following information. District, County, Route, Starting Post Mile including its Prefix, Ending Post Mile including Prefix, Description of change and Add/Update/Delete information. It is important to update all affected prefixes when a new section is added or removed.

Example: East bound Route 080 in Sacramento County from Post Mile 7.000 to Post Mile 10.000 was realigned. The realignment caused an increase in .5 miles of lineage to the highway between these Post Miles. The construction which was done caused a new section to be added with an RPM prefix. The new section is RPM 7.000 to RPM 10.500 with an equation of RPM 10.500 equates to PM 10.000. You need to document the following: First document that the section of highway which currently falls between Post Mile 7.000 and Post Mile 10.000 needs to be expired. The highway currently has a prefix of PM from Post Mile 0.000 to Post Mile 15.825. You must document that you want to expire one section and add three new unique sections. To accomplish this you document that you want to expire the complete section that is being affected. This is Post Mile 0.000 to 15.825. Then document the first new section you want to add which is PM 0.000 to PM 7.000. Then document the second section RPM 7.000 to RPM 10.500. This is the portion from the re-alignment. Finally document the last section to add PM 10.000 to PM 15.825. You now have an extra .5 miles of roadway where the old Post Mile 7.000 to Post Mile 10.000 had been. That same section is now 3.5 miles long represented by RPM 7.000 to RPM 10.500. This information is to be input into the system by HQ IMMS. Forward all documentation to HQ IMMS.

Roadway ID	From Post Mile	Prefix	To Post Mile	Prefix	Designation	Add/Update/Expire
03-SAC-080	0.000	PM	15.825	PM	Realignment	Expire
03-SAC-080	0.000	PM	7.000	PM	Realignment	Add
03-SAC-080	7.000	RPM	10.500	RPM	Realignment	Add
03-SAC-080	10.000	PM	15.825	PM	Realignment	Add

9.6 ASSETS

There are many Assets in the system and more are being added on an ongoing basis. The IMMS Coordinators do not add or edit any of the information on the Assets Tab. Please contact HQ IMMS if there is an issue with assets. Electrical Assets are added by the District Electrical Signal and Lighting Coordinators. Bridge assets are added through an interface with the Bridge Management System, BMS. If you have a bridge that is not in the system notify HQ IMMS. They will request an interface to update the bridge information. To add any other Assets the District IMMS Coordinator needs to coordinate with the Headquarters. OMSS.

9.7 LANES AND SHOULDERS

When inventorying Lanes and Shoulders the District IMMS Coordinator should collect and log the following information: Roadway ID, Lane Type, Position, starting Post Mile including Prefix, ending Post Mile including Prefix, Add/Update/Delete. Include a value of "Paved or Unpaved" in the Value/Position column when inventorying shoulders.

Example: An additional lane was added and the outside shoulder is now paved with AC for the complete distance of the new lane. The lane has been added in the north bound direction of Highway 99 in Merced County from post mile 10.323 to post mile 13.843. The following information needs to be logged. First log the additional Lane. Then log that you want to add the new paved shoulder.

Roadway ID	Lane Type	Value / Position	From Post Mile	Prefix	To Post Mile	Prefix	Add/Update/Expire
10-MER-099	Travel Way	SB-LANE 3	10.323	PM	13.843	PM	Add
10-MER-099	Shoulder Paved	SB-OUT	10.323	PM	13.843	PM	Add

9.8 APPURTENANCES

Appurtenances in IMMS consist of Roadside Rests, Park & Ride Lots, Structural Treatment Best Management Practices (STBMP's), Vista Points, Weigh Stations, Inspection Stations, Toll Plazas, Trans Bay Terminal as well a few other non Caltrans facilities located within our right of way. Appurtenances are added by Headquarters OMSS. The necessary information needed to add these to the system are Appurtenance type, District, County, Name and Physical location or address. Contact your District IMMS Coordinator when you have any new appurtenances. If the appurtenance is an STBMP contact your District Stormwater Coordinator also.

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CHAPTER TEN

CODING DEFINITIONS

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10.1	ERROR CORRECTION
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10.3	SPECIAL DESIGNATIONS AND PROJECT CODES
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10.5	TRAMS ACTIVITY CODES

10.0 INTRODUCTION

In accounting terms, codes are “alpha/numeric digits assigned to represent entries, transactions, or data elements required to affect a desirable flow of information”.

There are various types of coding used in the Maintenance Division used for a variety of purposes. For example, coding is used to identify what type of work was performed, identify work that is reimbursable, track certain work activity for budgetary or planning purposes, respond to legal questions, meet legislative mandates or statutes, meet departmental policies, and bill third parties for damage to State property. It is therefore very important that Maintenance Supervisors accurately record work activity, and use the appropriate coding when required.

Maintenance Supervisors should read and be familiar with the all instructions in the Maintenance Manual Volume 2, as well as any special reporting requirements that are issued by the district that are not included in Volume 2.

The purpose of this section is to provide definition for the most common types of coding used by the Maintenance Division in order to give the Maintenance Supervisors and managers a better understanding of their purpose.

July 2005

10.1 ERROR CORRECTION

Error corrections made before 1:00 a.m. are called “pre-interface” corrections. Changes made before the interface can be made by simply adjusting the Work Order. Therefore, it is important to double check work, and correct any errors as soon as possible.

CORE FIELDS

Core fields cannot be changed or coding added once interface has run. After interface, **the entire Work Order must be corrected**. Below is a list of core fields:

ASSET
ACTIVITY
CREW
CHARGE DISTRICT
EXPENDITURE AUTHORIZATION (EA)
SUB-JOB
FEDERAL AID ELIGIBILITY CODE
TRAMS ACTIVITY CODE
SPECIAL DESIGNATION
EXTRA ITEM

The IMMS Activity Instructions, Families A through Y, which are included in Maintenance Manual Volume 2, “Part Two”, provide guidance regarding which coding to use and when in most circumstances. To help avoid error corrections, follow the Activity Instructions, and contact your District IMMS Coordinator if unsure of coding requirements for the job you are doing.

July 2005

10.2 EXPENDITURE AUTHORIZATIONS

Expenditure Authorizations (EA's) allow charges against approved functions.

There are two kinds of EA's

➤ Single phase EA.

This group generally starts with a 5 or 9 and may be any combination of numbers and letters. Single phase means that the E.A. does not change. Maintenance Activities (Family Problems) are single phase EA's. and (in TRAMS) begin with 5. The 5 is not visible in IMMS. When you enter an IMMS "Activity" in an IMMS Work Order, you are entering a Maintenance EA. For example, assistance with traffic control would be M90100. TRAMS does not recognize the entire IMMS Activity, and instead, only shows "0's" following the Family Problem (example: 5M9000).

Day Labor projects are classified and funded as capital outlay with single phase EAs in the **916xxx** grouping. Special "Day Labor" IMMS Activities have been developed and should be used along with the appropriate Day Labor EA. Contact your District IMMS Coordinator or District Maintenance Engineer to insure your Day Labor project has been approved, and to insure you have been provided the appropriate EA. to charge to.

➤ Multi-phase EA.

Multi-phase EA's derive their name from the way they are set up.

Multiphase projects may originate in districts. Most multiphase EAs are established for Capital Outlay projects that require use of **two or more work phases**. However, multiphase EAs may be established for other work when appropriate. For example, Major Maintenance projects usually require use of a multiphase EA to cover design, contract, and construction engineering phases. Contact your District IMMS Coordinator or District Resource Manager when you have questions regarding the appropriateness of using any Expenditure Authorization.

The first digit of a multi-phase EA will normally begin with 0, 1, 2, 3, or 4.

October 2006

The sixth (last digit) indicates the functional phase of the project as follows:

K	Project Initiation Document (PID Preparation)
0	Project Report/Environmental Document
1	Design (PS&E)
2	Right of Way Activities
3	Construction Engineering
4	Major or Minor A Contract
5	Minor B Contract
6	Not in Use
7	Miscellaneous Work Requiring Separate Accounting
8	Cooperative and Service Agreements
9	Right of Way – Capital Outlay (Normal)
H	Right of Way – Capital Outlay (Hardship or Protection)
R	Right of Way – Support (Rental Property Management)

If the last digit is a **K, 0, 1, 2, or 3**, Maintenance can charge to this EA and the EA can be used in IMMS.

If the last digit is **not** a K, 0, 1, 2, or 3, Maintenance **cannot charge to the EA** and the EA will not work in IMMS.

Expenditure Authorizations and IMMS

The Expenditure Authorization (EA) will automatically generate in the EA field on the Additional tab based on the Activity chosen during creation of the Work Order.

For those Activities related to reimbursable funds, the system will prompt the user to enter an EA that is valid for their district, for that reimbursable Activity. Therefore, for reimbursable work, a valid EA must be entered before the system will allow creating the Work Order.

Expenditure Authorization is a “core field” and cannot be changed or added once charged and interface has run. The entire Work Order must be corrected if wrong EA has been charged or an EA must be added.

When using multiphase EA's, unless otherwise directed, use the FAE/Object Code of 1 038.

Close Work Orders daily when using EA's. This practice will greatly reduce risk of errors.

10.3 SPECIAL DESIGNATIONS and IMMS PROJECT NUMBERS

If a district wishes to capture costs for specific Maintenance work, **and need these costs available to view in TRAMS**, a Special Designation can be used to track the costs. Unlike an Expenditure Authorization, the use of a Special Designation does not result in direct charges to a function/Division. The Special Designation is only a tool for grouping the charges for a specific work activity so that that work can be tracked and segregated from other work activity. Special Designations are used less frequently in IMMS due to the ability to create a “Project Number”.

Essentially, a Project Number serves the same purpose as a Special Designation, with the exception that Project Numbers are only reflected in IMMS reporting and do not go to TRAMS. Project Numbers should be used unless charges need to be viewed in TRAMS. One benefit of using a Project Number vs. a Special Designation is that a Project Number can be added to a Work Order later. A Special Designation cannot be added later without going through *core field* error correction procedures.

SPECIAL DESIGNATIONS / PROJECT NUMBERS and IMMS

Existing Special Designation Numbers and Project Numbers can be located by doing a “pop-up” in each field, and narrowing search.

Some IMMS Activities require the use of Special Designation or Project Numbers, either whenever the Activity is used, or only in certain circumstances. Always refer to the Activity Instructions to determine Special Reporting Requirements before starting a Work Order.

Special Designation is a “core field” and cannot be changed or added once charged and interface has run. The entire Work Order must corrected if wrong Special Designation has been charged or one must be added.

To request a new Special Designation or Project Number, contact your District IMMS Coordinator.

October 2006

10.4 SUBJOBS

A Subjob is used whenever work is performed on toll bridges or toll bridge approaches. Subjobs are also required whenever an Expenditure Authorization is used which requires a Subjob. Subjobs for toll bridges begin with “3T”. The remaining three digits (3Txxx) identify the specific toll bridge. See the Maintenance Activity Instructions for toll bridge Subjob and Expenditure Authorization reporting requirements.

SUBJOBS AND IMMS

Subjob is a “core field”, and cannot be changed or coding added once charged and interface has run. The entire Work Order must be corrected if wrong Subjob has been charged or one must be added.

10.5 TRAMS ACTIVITY CODE

The TRAMS FAE/Activity Code is a four digit number used to classify labor charges in the performance of a specific function or duty.

The FAE Code is the first of the four-digit code. The FAE Code is normally number 1 or 2. A number 1 denotes eligibility of Federal reimbursement. A number 2 denotes State funding. Normally, Maintenance forces use 2. Number 1 should not be used unless you have been given specific instructions to use it.

The three-digit Activity Code is used to provide detail for labor charges beyond the information found in the Expenditure Authorization.

TRAMS ACTIVITY CODES AND IMMS

The most common code used is 2-036, for routine highway maintenance work. The system does not default to 036 in order to help prevent errors. The user must enter the proper code for each Work Order, **at the time the Work Order is created**. Always read the Special Reporting Requirements included with each Activity Instruction, or contact your District IMMS Coordinator to determine if an Activity Code other than 036 is required.

TRAMS Activity Code is a “core field” and cannot be changed or added once charged and interface has run. The entire Work Order must be corrected if a wrong Activity Code has been charged.

October 2006

ACTIVITY CODES

Following are the most common Activity Codes used by Maintenance. For complete list of Activity Codes, refer to Accounting Coding Manual.

F.A.**ELIG./ACT.****2 036 MAINTENANCE**

Work involved in the preparation and keeping of rights of way and each type of roadway, structure, safety convenience of device, planting, illumination equipment and other facility, in the safe and usable condition to which it has been improved or constructed. Includes operation of special safety conveniences, devices, and illumination equipment.

Also includes emergency work necessitated by accidents, storms or other weather conditions, slides, settlements, or other unusual or unexpected damage to a roadway, structure or facility which did not occur during a legally declared state of emergency or disaster.

Area Superintendents, Maintenance Region Managers, District Maintenance Engineers and Headquarters reviewing and supervisory personnel in senior classifications, use Activity Code 002.

For emergency work, repairs, and restoration of State highways resulting from a legally declared emergency or disaster, use Activity Code 038.

2 037 PERMIT REVIEW, ISSUANCE AND INSPECTION

Work involved in the review of permit applications and the preparation and processing of transportation, encroachment, and utility permits.

1 038 NON HIGHWAY MAINTENANCE WORK

Various work operations not described in other Activity Codes performed by Maintenance employees (including casual day laborers or other classifications).

Includes:

- Emergency work, repairs, and restoration of State highway necessitated by accidents, landslides, severe weather conditions, or other catastrophes that occur during a legally declared emergency or disaster.
- Day Labor projects approved by the Director.
- Maintenance of rental properties in the right of way.
- LOGO sign maintenance.

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**F.A.
ELIG./ACT.****1,2 040 OUTDOOR ADVERTISING**

All work involved in administering the Outdoor Advertising Act. Includes sign inspection operations, and work involved by maintenance personnel or others in removing, storing, and/or disposing of outdoor advertising signs which are not in compliance with the requirements of the Outdoor Advertising Act.

Use 1 040 for work involved in sign removal on Federally aided routes.

Use EA 960110 for the administration and supervision of Outdoor Advertising.

2 049 SAFETY

Work involved in the operation and administration of the Department of Transportation Safety Program performed by the Safety Engineer or supervisor and immediate staff.

Work done by the Safety Committee members in preparation of the participation in safety meetings, and by other personnel when specifically assigned to participate in a Safety Program. Includes district safety meetings and tailgate meetings held in the districts.

Time spent by employees receiving routine instructions in safety procedures or acting as instructors in an orientation process involving safety. This work is to be charged to the administrative EA related to the functional division of work normally performed by such personnel. However, administrative personnel in the Administrative Management System should use their normal AMS Expenditure Authorization.

2 052 BUILDINGS, GROUNDS, AND FACILITIES UPKEEP

Work involved in the regular upkeep, repair, and alteration of buildings, grounds, parking areas, facilities and related equipment. Includes janitorial service, elevator operation, electricians, plumbers, laborers, carpenters, painters, gardeners and ground-persons, watch-persons, mechanics, etc.

1,2 058 TRAINING - INSTRUCTOR

Participating in all levels of authorized training as an assigned instructor, including work involved in preparing for, conducting, evaluating, and reporting on the training given. Normally charged to the training Expenditure Authorization for the function benefiting. Includes time spent in travel to and from the training sessions.

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**F.A.
ELIG./ACT.****1,2 059 TRAINING - TRAINEE**

Participating in all levels of authorized training as a trainee for the purpose of building skills and knowledge needed as useful in work performance. Includes authorized courses in letter writing, supervision, asphalt concrete, portland cement, fiscal seminars, institute of transportation and traffic engineering, driver training, orientation, State Personnel Board conducted sessions, right of way training, management conferences, group conferences by Headquarters division heads called for the discussion of ongoing efforts or new developments in specific work areas.

2 075 EQUAL EMPLOYMENT OPPORTUNITY

This code is used to record Equal Employment Opportunity activities subject to Federal and State laws, orders, rules and regulations such as: 1964 & 1972 U.S. Civil Rights Acts, Executive Orders 11246, Americans with Disabilities Act (ADA), U.S. Constitution, 14th Amendment, Government Code Sections: Fair Employment Practices, Affirmative Action programs, Career Opportunity Development, Bilingual Services, etc.

Only supervisors, managers, and employees who are responding to the bilingual survey may use this Activity Code.

Special Designation codes are required with this code.

2 075 (AA/EO) ADVISORY COMMITTEES

This code is used to capture time spent on meetings/activities relating to Affirmative Action/Equal Opportunity including regular sub-committee, EEO meetings, planning workshops and cultural events, etc., liaison activities to Advisory Committee such as guidance and technical assistance, and attending events sponsored by Advisory Committees.

Only supervisors, managers, and employees who have been selected to serve on the Advisory Committee may use this Activity Code.

Special Designation codes are required with this code.

July 2005

**F.A.
ELIG./ACT.****2 080 UNION OFFICER / STEWARD REPRESENTATION TIME OFF**

Represented employees who are assigned to their union's bargaining team use this code whenever they are on State paid release time. Release time may be for either bargaining for the union's MOU or impact negotiations. Represented employees who are designated union stewards use this code when actually representing union members in grievances, including investigating grievances, consulting with grievants, representing grievants to management, participating in grievance arbitration, etc.

Only represented employees who are certified to the Chief, Office of Labor Relations by their union as bargaining team members or who are certified to the Department of Personnel Administration as designated union stewards may use this code.

Replaces old Activities 80, 81, 84, 85, and 88.

2 084 RISK MANAGEMENT AND EMPLOYEE ASSISTANCE

For use by confidential, supervisory, managerial, or excluded employees. Activities appropriate to this code are include the progressive discipline process, preparation of formal adverse actions, and consultations with supervisors and managers.

Replaces old Activities 73 and 74.

July 2005

**F.A.
ELIG./ACT.****2 099 ADMINISTRATIVE TIME OFF**

This code is used to capture the salary and wages for paid time off in excess of one hour as authorized by the Governor, Director, or delegate in any of the following categories:

- Governor authorized time off such as celebration of the Christmas/New Year holidays and extraordinary events.
- Time off during an officially declared state of emergency.
- Time off during localized necessary building or office area shutdowns ordered in response to threats to employees safety, office move disruptions, or to loss of essential utility service.
- Time off for professional and civil service exams.
- Employee time at disciplinary hearings, SPB appeal hearing, or DPA hearings.
- Time ordered off by manager or supervisor up to five days in accordance the DPA rules.
- Time ordered off by manager or supervisor over five days and approved by DPA in advance.
- Time off waiting for results from Fit for Duty Exam.
- Time off waiting for results from Drug Testing.
- Time off to vote on Election Day, subject to prescribed conditions.

This code is not to be used to record authorized informal time off from regular duties to attend culturally diversified activities. Separate Activity Codes are used for such time off.

CHAPTER ELEVEN

APPENDIX

The **Appendix** contains miscellaneous information, oftentimes found useful by the reader. It contains information such as:

- Highway Maintenance Program Code and Descriptions
- County Codes, sorted alphabetically and numerically
- Grass Mowing Acreage Chart
- Vehicle Speed/Chemical Application Chart
- Chemical Proportioning Chart
- Miscellaneous Conversion Tables:
 - Minutes to Decimal Hours
 - Miles to Linear Feet and Thousand (M) Linear Feet
 - Miles to Meter and Miles to Kilometer
 - Shrub Spacing per Acre and per Mile
 - Sections of Guardrail per Mile
 - Metric Conversion Factors
 - Conversion from Post Mile to Kilometer Post

Highway Maintenance Program Coding & Descriptions

Program	Family	Family Desc	Problem Description	Program Element Component Task
HM1 (Roadbed)	A	Flexible Pavement	Crack/Joint repair	20.80.010.010
			Poor ride quality	20.80.010.010
			Structural pavement failure	20.80.010.010
			Pot Holes, local depressions	20.80.010.010
			Preventive Maintenance	20.80.010.010
			Misc.	20.80.010.010
	B	Rigid Pavement	Crack/Joint repair	20.80.010.020
			Poor ride quality	20.80.010.020
			Structural pavement failure	20.80.010.020
			Bridge approach/departure	20.80.010.020
			Paved shoulder - preventive Mtce	20.80.010.020
			Paved shoulder - repair	20.80.010.020
			Misc.	20.80.010.020
HM2 (Roadside)	C	Slopes / Drainage / Veg	Unpaved Sho. Management	20.80.020.030
			Non-landscaped weed control	20.80.020.030
			Non-landscaped tree/brush veg	20.80.020.030
			Fence repair	20.80.020.030
			Drainage obstruct. - ditch/channel	20.80.020.030
			Drainage obstruct. - drains/culverts	20.80.020.030
			Drainage obstruct. - subsurface	20.80.020.030
			Worn/Damaged drainage facility	20.80.020.030
			Misc.	20.80.020.030
	D	Litter & Debris	Debris/Carcass pickup	20.80.020.040
			Freeway patrol	20.80.020.040
			sweeping	20.80.020.040
			Litter pickup	20.80.020.040
			Spills	20.80.020.040
			Graffiti	20.80.020.040
			Misc.	20.80.020.040
	E	Landscaping	Weed control	20.80.020.050
			Pruning/Thinning/Removing/Replacing	20.80.020.050
			Irrigation	20.80.020.050
			Misc.	20.80.020.050
	F	Environmental	Underground Storage Tank Program	20.80.020.050
			Water Quality Control Program	20.80.020.050
			Misc.	20.80.020.050
	G	Public Facilities	Roadside Rests	20.80.020.070
			Vista Points/Park & Ride Lots	20.80.020.070
			Weigh Stations / Weigh in Motion	20.80.020.070
			Misc.	20.80.020.070

Highway Maintenance Program Coding & Descriptions

Program	Family	Family Desc	Problem Description	Program Element Component Task
HM3	H	Bridges	Substructure	20.80.030.080
(Structures)		v	Superstructure - steel	20.80.030.080
v		v	Superstructure - concrete	20.80.030.080
v		v	Expansion joints	20.80.030.080
v		v	Railings	20.80.030.080
v		v	Drainage systems	20.80.030.080
v		v	Painting	20.80.030.080
v		v	Misc.	20.80.030.080
v	J	Other Structures	Pump plant	20.80.030.100
v		v	Tunnel/Tube	20.80.030.100
v		v	Ferry boat	20.80.030.100
v		v	SFOBB terminal building	20.80.030.100
v		v	Tow truck service	20.80.030.100
v		v	Scheduled lane changing	20.80.030.100
v		v	Toll booth maintenance	20.80.030.100
v		v	Misc.	20.80.030.100
HM4				
(Traffic Control & Service Facilities)	K	Electrical	Highway lighting	20.80.040.110
v		v	Sign lighting	20.80.040.110
v		v	Toll bridge elect. mtce.	20.80.040.110
v		v	Traffic signals	20.80.040.110
v		v	Flashing beacons	20.80.040.110
v		v	Ramp meters	20.80.040.110
v		v	Traffic surveillance	20.80.040.110
v		v	Traffic counters	20.80.040.110
v		v	Misc.	20.80.040.110
v	M	Traffic Guidance	Pavement striping	20.80.040.130
v		v	Pavement markings	20.80.040.130
v		v	Raised pavement markers	20.80.040.130
v		v	Signs	20.80.040.130
v		v	Roadside markers	20.80.040.130
v		v	Guardrail	20.80.040.130
v		v	Median barrier	20.80.040.130
v		v	Vehicle energy attenuator	20.80.040.130
v		v	Misc.	20.80.040.130
HM6	R	Snow / Ice Control	Remove snow	20.80.060.180
(Snow & Major Damage)		v	Snow/Ice cover	20.80.060.180
v		v	Snow poles/Signs appliances	20.80.060.180
v		v	Manned chain control operations	20.80.060.180
v		v	Support personnel	20.80.060.180
v		v	Misc.	20.80.060.180

Highway Maintenance Program Coding & Descriptions

Program	Family	Family Desc	Problem Description	Program Element Component Task
HM6 (Snow & Major Damage) v v v	S	Snow / Ice Control v v v v v v	Sand/Rock patrol Storm patrol Minor slides/Slipouts & Misc. Major Damage - Immediate Action Major Damage - Public Protection Major Damage - Perm./Long Term Rep. Misc.	20.80.060.190 20.80.060.190 20.80.060.190 20.80.060.190 20.80.060.190 20.80.060.190 20.80.060.190
HM5 (Mtce. Aux. Services) v v v v v v v	T	Support v v v v v v v	HQ Maintenance Program Mgt. District Office Management Toll Bridge Property Damage Insurance Region/Area Office Management Mtce. Station - General operations Mtce. Station - Custodial Mtce. Station - Minor repairs Mtce. Station - Recv./Issuing materials. Misc.	20.80.050.200 20.80.050.200 20.80.050.200 20.80.050.200 20.80.050.200 20.80.050.200 20.80.050.200 20.80.050.200 20.80.050.200
v v v v v v	W	Training & Field Aux. Ser. v v v v v v	Legally mandated Kingvale summer operation META Other training Field Auxiliary Services Misc.	20.80.050.230 20.80.050.230 20.80.050.230 20.80.050.230 20.80.050.230 20.80.050.230
Non HM v v v v v	Y	Work For Others v v v v v	Assist mechanic Servicing and Level 1 PM Transporting equipment Communications equipment & facilities Permits Misc.	Requires an EA Requires an EA Requires an EA Requires an EA Requires an EA Requires an EA

County Codes

Alphabetic Sort

Alameda	(Ala)	33
Alpine	(ALP)	31
Amador	(AMA)	26
Butte	(BUT)	12
Calvaras	(CAL)	30
Colusa	(COL)	15
Contra Costa	(CC)	28
Del Norte	(DN)	01
El Dorado	(ED)	25
Fresno	(FRE)	42
Glenn	(GLE)	11
Humboldt	(HUM)	04
Imperial	(IMP)	58
Inyo	(INY)	48
Kern	(KER)	50
Kings	(KIN)	45
Lake	(LAK)	14
Lassen	(LAS)	07
Los Angeles	(LA)	53
Madera	(MAD)	41
Marin	(MRN)	27
Mariposa	(MPA)	40
Mendocino	(MEN)	10
Merced	(MER)	39
Modoc	(MOD)	03
Mono	(MNO)	47
Monterey	(MON)	44
Napa	(NAP)	21
Nevada	(NEV)	17
Orange	(ORA)	55
Placer	(PLA)	19
Plumas	(PLU)	09
Riverside	(RIV)	56
Sacramento	(SAC)	24
San Benito	(SBT)	43
San Bernardino	(SBD)	54
San Diego	(SD)	57
San Francisco	(SF)	34
San Joaquin	(SJ)	29
San Luis Obispo	(SLO)	49
San Mateo	(SM)	35
Santa Barbara	(SB)	51
Santa Clara	(SCL)	37
Santa Cruz	(SCR)	36
Shasta	(SHA)	06
Sierra	(SIE)	13
Siskiyou	(SIS)	02
Solano	(SOL)	23
Sonoma	(SON)	20
Stanislaus	(STA)	38
Sutter	(SUT)	18
Tehama	(THE)	08
Trinity	(TRI)	05
Tulare	(TUL)	46
Tuolumne	(TUO)	32
Ventura	(VEN)	52
Yolo	(YOL)	22
Yuba	(YUB)	16

Numeric

01	Del Norte
02	Siskiyou
03	Modoc
04	Humboldt
05	Trinity
06	Shasta
07	Lassen
08	Tehama
09	Plumas
10	Mendocino
11	Glenn
12	Butte
13	Sierra
14	Lake
15	Colusa
16	Yuba
17	Nevada
18	Sutter
19	Placer
20	Sonoma
21	Napa
22	Yolo
23	Solano
24	Sacramento
25	El Dorado
26	Amador
27	Marin
28	Contra Costa
29	San Joaquin
30	Calaveras
31	Alpine
32	Tuolumne
33	Alameda
34	San Francisco
35	San Mateo
36	Santa Cruz
37	Santa Clara
38	Stanislaus
39	Merced
40	Mariposa
41	Madera
42	Fresno
43	San Benito
44	Monterey
45	Kings
46	Tulare
47	Mono
48	Inyo
59	San Luis Obispo
50	Kern
51	Santa Barbara
52	Ventura
53	Los Angeles
54	San Bernardino
55	Orange
56	Riverside
57	San Diego
58	Imperial

GRASS MOWING ACREAGE CHART

The Grass Mowing Acreage Chart is to be used for determining the number of acres for planning, scheduling, and reporting. Use of the chart requires an estimate of the average width in feet of the right of way mowed and a determination of the length in miles of the area mowed. Several examples which will assist you in its use:

EXAMPLE 1:

The average width of the right of way mowed is 30 feet. The distance mowed is 1 mile. To determine the average mowed by the use of the chart .

$$1 \text{ mile} \times 30 \text{ feet width} = 3.6 \text{ acres mowed}$$

EXAMPLE 2:

The average width of the right of way mowed is 40 feet. The distance mowed is 2.7 miles. To determine the average mowed by the use of the chart.

$$2 \text{ miles} \times 40 \text{ feet width} = 9.7 \text{ acres mowed}$$

$$0.7 \text{ miles} \times 40 \text{ feet width} = 3.4 \text{ acres mowed}$$

$$\text{Total} = 13.1 \text{ acres mowed}$$

EXAMPLE 3:

The average width of the right of way mowed is 35 feet. The distance mowed is 7.8 miles. To determine the average mowed by the use of the chart.

$$7 \text{ miles} \times 30 \text{ feet width} = 25.5 \text{ acres mowed}$$

$$0.8 \text{ miles} \times 30 \text{ feet width} = 2.9 \text{ acres mowed}$$

$$7 \text{ miles} \times 5 \text{ feet width} = 4.2 \text{ acres mowed}$$

$$0.8 \text{ miles} \times 5 \text{ feet width} = 0.5 \text{ acres mowed}$$

$$\text{Total} = 33.1 \text{ acres mowed}$$

LENGTH IN MILES

	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	2	3	4	5	6	7	8	9	10
1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.5	0.6	0.7	0.9	1.0	1.1	1.2
2	0.0	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.0	1.2	1.5	1.7	1.9	2.2	2.4
3	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.7	1.1	1.5	1.8	2.2	2.6	2.9	3.3	3.6
4	0.0	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	1.0	1.5	1.9	2.4	2.9	3.4	3.9	4.4	4.9
5	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.6	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.9	5.5	6.1
6	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.7	1.5	2.2	2.9	3.6	4.4	5.1	5.8	6.5	7.3
7	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9	1.7	2.6	3.4	4.2	5.1	5.9	6.8	7.6	8.5
8	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.9	2.9	3.9	4.9	5.8	6.8	7.8	8.7	9.7
9	0.1	0.2	0.3	0.5	0.6	0.7	0.8	0.9	1.0	1.1	2.2	3.3	4.4	5.5	6.5	7.6	8.7	9.8	10.9
10	0.1	0.2	0.4	1.0	0.6	0.7	0.9	1.0	1.1	1.2	2.4	3.6	4.9	6.1	7.3	8.5	9.7	10.9	12.1
20	0.2	0.5	0.7	1.5	1.2	1.5	1.7	1.9	2.2	2.4	4.9	7.3	9.7	12.1	14.6	17.0	19.4	21.8	24.2
30	0.4	0.7	1.1	1.9	1.8	2.2	2.6	2.9	3.3	3.6	7.3	10.9	14.6	18.2	21.8	25.5	29.1	32.7	36.4
40	0.5	1.0	1.5	2.4	2.4	2.9	3.4	3.9	4.4	4.9	9.7	14.6	19.4	24.2	29.1	33.9	38.8	43.6	48.5
50	0.6	1.2	1.8	2.9	3.0	3.6	4.2	4.9	5.5	6.1	12.1	18.2	24.2	30.3	36.4	42.4	48.5	54.6	60.6
60	0.7	1.5	2.2	3.4	3.6	4.4	5.1	5.8	6.6	7.3	14.6	21.8	29.1	36.4	43.6	50.9	58.2	65.5	72.7
70	0.9	1.7	2.6	3.9	4.2	5.1	5.9	6.8	7.6	8.5	17.0	25.5	33.9	42.4	50.9	59.4	67.9	76.4	84.9
80	1.0	1.9	2.9	4.4	4.9	5.8	6.8	7.8	8.7	9.7	19.4	29.1	38.8	48.5	58.2	67.9	77.6	87.3	97.0
90	1.1	2.2	3.3	4.9	5.5	6.6	7.6	8.7	9.8	10.9	21.8	32.7	43.6	54.6	65.5	76.4	87.3	98.2	109.1
100	1.2	2.4	3.6	0.4	6.1	7.8	8.5	9.7	10.9	12.1	24.2	36.4	48.5	60.6	72.7	84.9	97.0	109.1	121.2
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	2	3	4	5	6	7	8	9	10

July 2005

VEHICLE SPEEDS FOR APPLICATION OF CHEMICALS

(Rate of Application - 100 gallons per Acre)

AVERAGE WIDTH OF CUT IN FEET

		Chemical Output in Gallons per minute																			
		1	.2	.3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Pattern	1	4.8	9.6	14.4	19.	24.0	28.8	33.6	38.4	43.2	48.0	52.8	57.6	62.4	67.2	72.0	76.8	81.6	86.4	91.2	96.0
	2	3.4	4.8	7.2	9.6	12.0	14.4	16.8	19.2	21.6	24.0	26.4	28.8	31.2	33.6	38.0	38.4	40.8	43.2	45.6	48.0
	3	1.4	3.2	4.8	6.4	8.0	9.6	11.2	12.8	14.4	16.0	17.6	19.2	20.8	22.4	24.0	25.6	27.2	28.8	30.4	32.0
	4	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0	13.2	14.4	15.6	16.8	18.0	19.2	20.4	21.6	22.8	24.0
	5	1.0	1.9	2.8	4.0	4.8	5.8	6.7	7.7	8.6	9.6	10.6	11.5	12.5	13.4	14.4	15.4	16.3	17.3	18.2	19.2
	6	1.0	1.6	2.4	3.0	4.0	4.8	5.6	6.4	7.2	8.0	8.8	9.6	10.4	11.2	12.0	12.8	13.6	14.4	15.2	16.0
Width	7	1.0	1.4	2.0	3.0	3.4	4.1	4.8	5.5	6.1	6.9	7.5	8.2	8.9	9.6	10.2	10.9	11.6	12.3	12.9	13.6
	8	1.0	1.2	1.8	2.5	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	7.8	8.4	9.0	9.6	10.2	10.8	11.4	12.0
	9	0.5	1.0	1.6	2.1	2.7	3.2	3.7	4.3	4.8	5.3	5.9	6.4	7.0	7.5	8.0	8.5	9.1	9.6	10.1	10.7
	10	0.5	1.0	1.5	1.9	2.4	2.9	3.4	3.9	4.3	4.8	5.3	5.8	6.2	6.7	7.2	7.7	8.2	8.6	9.1	9.6
	11	0.5	1.0	1.3	1.7	2.2	2.6	3.1	3.5	4.0	4.4	4.8	5.2	5.7	6.1	6.5	7.0	7.4	7.8	8.8	8.7
	12	0.5	1.0	1.2	1.6	2.0	2.4	2.8	3.2	3.6	4.0	4.4	4.8	5.2	5.6	6.0	6.4	6.8	7.2	7.6	8.0
In Feet	13	0.5	1.0	1.1	1.5	1.8	2.2	2.6	3.0	3.3	3.7	4.1	4.4	4.8	5.2	5.5	6.0	6.3	6.6	7.0	7.4
	14	0.5	1.0	1.0	1.4	1.7	2.1	2.4	2.7	3.1	3.4	3.7	4.1	4.4	4.8	5.1	5.5	5.8	6.2	6.5	6.9
	15	0.5	0.5	1.0	1.3	1.6	2.0	2.2	2.6	2.9	3.2	3.5	3.8	4.2	4.5	4.8	5.1	5.4	5.8	6.1	6.4
	16	0.5	0.5	1.0	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.0
	17	0.5	0.5	1.0	1.1	1.4	1.7	2.0	2.3	2.5	2.8	3.1	3.4	3.7	4.0	4.2	4.5	4.8	5.1	5.4	5.8
	18	0.5	0.5	1.0	1.1	1.3	1.6	1.9	2.1	2.4	2.7	3.0	3.2	3.5	3.7	4.0	4.3	4.5	4.8	5.1	5.3
	19	0.3	0.5	1.0	1.0	1.3	1.5	1.8	2.0	2.3	2.5	2.8	3.0	3.3	3.5	3.8	4.0	4.3	4.5	4.8	5.0
	20	0.3	0.5	1.0	1.0	1.2	1.4	1.7	2.0	2.2	2.4	2.6	2.9	3.1	3.4	3.6	3.8	4.1	4.3	4.6	4.8
	21	0.3	0.5	1.0	1.0	1.1	1.4	1.6	2.0	2.1	2.3	2.5	2.7	3.0	3.2	3.4	3.6	3.9	4.1	4.3	4.6
	22	0.3	0.5	1.0	1.0	1.1	1.3	1.5	2.0	2.0	2.2	2.4	2.6	2.8	3.1	3.3	3.5	3.7	3.9	4.1	4.4
	23	0.3	0.5	1.0	1.0	1.0	1.3	1.5	2.0	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.6	3.8	4.0	4.2
	24	0.3	0.5	1.0	1.0	1.0	1.2	1.4	1.5	1.9	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
	25	0.3	0.5	1.0	1.0	1.0	1.2	1.3	1.5	1.8	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.6	3.8

Tabulations in miles per hour.

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CHEMICAL PROPORTIONING CHART

Gallons of Water	100	50	25	15	5	2	1
Liquid Measure Of Chemical	2 gal.	1 gal.	2 qt.	2 1/2 pt.	1 1/2 C.	10 tbsp	5 tbsp.
	1 gal.	2 qt.	1 qt.	2 1/2 C.	3/4 C.	5 tbsp.	2 1/2 tbsp.
	2 qt.	1 qt.	2 C	19 tbsp.	6 1/2 tbsp	2 1/2 tbsp	4 tsp.
	1 qt.	1 pt.	1 C.	9 1/2 tbsp	3 tbsp.	1 1/4 tbsp	2 tsp.
	1 pt.	1/2 pt.	1/2 C	5 tbsp.	5 tsp.	2 tsp	1 tsp.
	3/4 pt.	3/4 C.	6 tbsp.	4 tbsp	3 1/2 tsp.	1 1/2 tsp.	3/4 tsp.
	1/2 pt.	1/2 C.	4 tbsp.	7 tsp.	2 1/2 tsp	1 tsp.	1/2 tsp
	6 lb.	3 lb.	1 1/2 lb.	14 oz.	5 oz.	2 oz.	1 oz.
Measure of Wettable Powder	5 lb.	2 1/2 lb.	1 1/4 lb.	12 oz.	4 oz.	1 1/2 oz.	3/4 oz.
	4 lb.	2 lb.	1 lb.	10 oz.	3 oz.	1 1/4 oz.	5/8 oz.
	3 lb.	1 1/2 lb.	3/4 lb.	7 oz.	2 1/2 oz.	1 oz.	1/2 oz.
	2 lb.	1 lb.	8 oz.	5 oz.	1 5/8 oz.	5/8 oz.	3/8 oz.
	1 lb.	1/2 lb	4 oz.	2 1/2 oz.	3/4 oz.	3/8 oz.	1/4 oz.
	3/4 lb.	6 oz.	3 oz.	1 3/4 oz.	5/8 oz.	1/4 oz.	1/8 oz.
	1/2 lb.	4 oz.	2 oz.	1 1/4 oz.	1/2 oz.	3/16 oz.	3/32 oz.

This quick reference spray chart is used to calculate larger or smaller quantities of spray when label directions give an amount or volume of chemical to be used in preparing a given quantity of spray. To use the chart, find a given amount of water on the top line, then work down to locate the specified amount of chemical. From this point, move left or right to find the needed amount of spray (in the top line) and work back down to the previous line to locate the amount of chemical to be used.

Example: Label directions specify 1 pint of liquid concentrate per 100 gallons, but you wish to prepare only 15 gallons. Find 100 gallons on the top line, then move down this column to 1 pint. From this point, move to the right on the same line to the 15 gallon column (top line) and read the correct amount of chemical to be used e.g., 5 tablespoons.

Measure References:

1 gallon = 4 quarts

1 quart = 2 pints

1 pint = 2 cups

1 cup = 16 tablespoons

1 cup = 8 ounces

1 fluid ounce = 2 tablespoons

1 tablespoon = 3 teaspoons

1 tablespoon = 1/2 ounce

1 teaspoon = 1/6 ounce

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TIME CONVERSION - MINUTES TO DECIMAL HOURS

<u>MINUTES</u>	<u>DECIMAL HOURS</u>	<u>MINUTES</u>	<u>DECIMAL HOURS</u>
1	.017	31	.517
2	.033	32	.533
3	.050	33	.550
4	.067	34	.567
5	.083	35	.583
6	.100	36	.600
7	.117	37	.617
8	.133	38	.633
9	.150	39	.650
10	.167	40	.667
11	.183	41	.683
12	.200	42	.700
13	.217	43	.717
14	.233	44	.733
15	.250	45	.750
16	.267	46	.767
17	.283	47	.783
18	.300	48	.800
19	.317	49	.817
20	.333	50	.833
21	.350	51	.850
22	.367	52	.867
23	.383	53	.883
24	.400	54	.900
25	.417	55	.917
26	.433	56	.933
27	.450	57	.950
28	.467	58	.967
29	.483	59	.983
30	.500	60	1.00

MILES TO LINEAR FEET AND THOUSAND (M) LINEAR FEET

Mile	Linear Ft	M Lin. Ft	Mile	Linear Ft	M Lin. Ft
.01	52.8	.05	.51	2692.8	2.69
.02	105.6	.11	.52	2745.6	2.75
.03	158.4	.16	.53	2798.4	2.80
.04	211.2	.21	.54	2851.2	2.85
.05	264.0	.26	.55	2904.0	2.90
.06	316.8	.32	.56	2956.8	2.96
.07	369.6	.37	.57	3009.6	3.01
.08	422.4	.42	.58	3062.4	3.06
.09	475.2	.48	.59	3115.2	3.12
.10	528.0	.53	.60	3168.0	3.17
.11	580.8	.58	.61	3220.8	3.22
.12	633.6	.63	.62	3273.6	3.27
.13	686.4	.69	.63	3326.4	3.33
.14	739.2	.74	.64	3379.2	3.38
.15	792.0	.79	.65	3432.0	3.43
.16	844.8	.84	.66	3484.8	3.48
.17	897.6	.90	.67	3537.6	3.54
.18	950.4	.95	.68	3590.4	3.59
.19	1003.2	1.00	.68	3643.2	3.64
.20	1056.0	1.06	.70	3696.0	3.70
.21	1108.8	1.11	.71	3748.8	3.75
.22	1161.6	1.16	.72	3801.6	3.80
.23	1214.4	1.21	.73	3854.4	3.85
.24	1267.2	1.27	.74	3907.2	3.91
.25	1320.0	1.32	.75	3960.0	3.96
.26	1372.8	1.37	.76	4012.8	4.01
.27	1425.6	1.42	.77	4065.6	4.07
.28	1478.4	1.48	.78	4118.4	4.12
.29	1531.2	1.53	.79	4171.2	4.17
.30	1584.0	1.58	.80	4224.0	4.22
.31	1636.8	1.64	.81	4276.8	4.28
.32	1689.6	1.69	.82	4329.6	4.33
.33	1742.4	1.74	.83	4382.4	4.38
.34	1795.2	1.80	.84	4435.2	4.44
.35	1848.0	1.85	.85	4488.0	4.49
.36	1900.8	1.90	.86	4540.8	4.54
.37	1953.6	1.95	.87	4593.6	4.59
.38	2006.4	2.01	.88	4646.4	4.65
.39	2059.2	2.06	.89	4699.2	4.70
.40	2112.0	2.11	.90	4752.0	4.75
.41	2164.8	2.16	.91	4804.8	4.80
.42	2217.6	2.22	.92	4857.6	4.86
.43	2270.4	2.27	.93	4910.4	4.91
.44	2323.2	2.32	.94	4963.2	4.96
.45	2376.0	2.38	.95	5016.0	5.02
.46	2428.8	2.43	.96	5068.8	5.07
.47	2481.6	2.48	.97	5121.6	5.12
.48	2534.4	2.53	.98	5174.4	5.17
.49	2587.2	2.59	.99	5227.2	5.23
.50	2640.0	2.64	1.00	5280.0	5.28

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MILES TO METER AND KILOMETERS

Mile	Meters	Kilometers	Mile	Meters	Kilometers
0.01	16.1	0.02	0.51	820.8	0.82
0.02	32.2	0.03	0.52	836.9	0.84
0.03	48.3	0.05	0.53	853.0	0.85
0.04	64.4	0.06	0.54	869.0	0.87
0.05	80.5	0.08	0.55	885.1	0.89
0.06	96.6	0.10	0.56	901.2	0.90
0.07	112.7	0.11	0.57	917.3	0.92
0.08	128.7	0.13	0.58	933.4	0.93
0.09	144.8	0.14	0.59	949.5	0.95
0.10	160.9	0.16	0.60	965.6	0.97
0.11	177.0	0.18	0.61	981.7	0.98
0.12	193.1	0.19	0.62	997.8	1.00
0.13	209.2	0.21	0.63	1013.9	1.01
0.14	225.3	0.23	0.64	1030.0	1.03
0.15	241.4	0.24	0.65	1046.1	1.05
0.16	257.5	0.26	0.66	1062.2	1.06
0.17	273.6	0.27	0.67	1078.3	1.08
0.18	289.7	0.29	0.68	1094.4	1.09
0.19	305.8	0.31	0.69	1110.4	1.11
0.20	321.9	0.32	0.70	1126.5	1.13
0.21	338.0	0.34	0.71	1142.6	1.14
0.22	354.1	0.35	0.72	1158.7	1.16
0.23	370.1	0.37	0.73	1174.8	1.17
0.24	386.2	0.39	0.74	1190.9	1.19
0.25	402.3	0.40	0.75	1207.0	1.21
0.26	418.4	0.42	0.76	1223.1	1.22
0.27	434.5	0.43	0.77	1239.2	1.24
0.28	450.6	0.45	0.78	1255.3	1.26
0.29	466.7	0.47	0.79	1271.4	1.27
0.30	482.8	0.48	0.80	1287.5	1.29
0.31	498.9	0.50	0.81	1303.6	1.30
0.32	515.0	0.51	0.82	1319.7	1.32
0.33	531.1	0.53	0.83	1335.8	1.34
0.34	547.2	0.55	0.84	1351.8	1.35
0.35	563.3	0.56	0.85	1367.9	1.37
0.36	579.4	0.58	0.86	1384.0	1.38
0.37	595.5	0.60	0.87	1400.1	1.40
0.38	611.6	0.61	0.88	1416.2	1.42
0.39	627.6	0.63	0.89	1432.3	1.43
0.40	643.7	0.64	0.90	1448.4	1.45
0.41	659.8	0.66	0.91	1464.5	1.46
0.42	675.9	0.68	0.92	1480.6	1.48
0.43	692.0	0.69	0.93	1496.7	1.50
0.44	708.1	0.71	0.94	1512.8	1.51
0.45	724.2	0.72	0.95	1528.9	1.53
0.46	740.3	0.74	0.96	1545.0	1.54
0.47	756.4	0.76	0.97	1561.1	1.56
0.48	772.5	0.77	0.98	1577.2	1.58
0.49	788.6	0.79	0.99	1593.3	1.59
0.50	804.7	0.80	1.00	1609.3	1.61

NUMBER OF SHRUBS PER ACRE

SPACING	NUMBER OF SHRUBS
3 x 3 Feet	4840
4 x 4 Feet	2722
5 x 5 Feet	1742
6 x 6 Feet	1210
8 x 8 Feet	680
10 x 10 Feet	435
12 x 12 Feet	302
14 x 14 Feet	222
16 x 16 Feet	170

NUMBER OF SHRUBS PER MILE FOR LINEAR PLANTING

SPACING	NUMBER OF SHRUBS
3 Feet	1760
4 Feet	1320
5 Feet	1056
6 Feet	880
8 Feet	660
10 Feet	528
12 Feet	440
14 Feet	377
16 Feet	330

SECTIONS OF GUARDRAIL PER MILE

MILE	TUTHILL (10' Length)	FLEXEAM (12 1/2' Length)
.01	5 Sections	4 Sections
.02	11 "	8 "
.03	16 "	13 "
.04	21 "	17 "
.05	26 "	21 "
.06	32 "	25 "
.07	37 "	30 "
.08	42 "	34 "
.09	48 "	38 "
.10	53 "	42 "
.20	106 "	84 "
.30	158 "	127 "
.40	211 "	169 "
.50	264 "	211 "
.60	317 "	253 "
.70	370 "	296 "
.80	422 "	338 "
.90	475 "	380 "
1.00	528 "	422 "
2.00	1056 "	844 "
3.00	1584 "	1266 "
4.00	2112 "	1688 "
5.00	2640 "	2110 "
10.00	5280 "	4220 "

METRIC CONVERSION FACTORS**Metric - Area, Length, and Volume Conversion Factors**

Quantity	From Inch-Pound Units	To Metric Units	Multiply By:
Length	Mile	Km	1.609 <u>344</u>
	Yard	M	0.914 <u>4</u>
	Foot	M	0.304 <u>8</u>
	Foot	Mm	<u>304.8</u>
	Inch	Mm	<u>25.4</u>
Area	Square mile	Square km	2.590 00
	Acre	Square m	4 046.856
	Acre	Ha (10 000 sq. m)	0.404 685 6
	Square yard	Square m	<u>0.836 127 36</u>
	Square foot	Square m	<u>0.092 903 04</u>
	Square inch	Square mm	<u>645.16</u>
Volume	Acre foot	Cubic m	1 233.49
	Cubic yard	Cubic m	0.764 555
	Cubic foot	Cubic m	0.028 316 8
	Cubic foot	Cubic cm	28 316.85
	Cubic foot	L (1000 cubic cm)	28.316 85
	100 board feet	Cubic m	0.235 974
	gallon	L (1000 cubic cm)	3.785 41
	cubic inch	Cubic cm	16.387 064
	cubic inch	Cubic mm	16 387 064

Note: Underline denotes exact number.

Conversion from Post Mile System to Kilometer Post System

Assumption: District, county and route designation will continue to be used in defining location on the highway system.

Process: To convert Post Mile to Kilometer Post location, multiply the post mile by **1.6093** and then round to three decimal places.

Example: 03-SAC-50-**P.M. 12.494 to P.M. 15.759** becomes
03-SAC-50-**KP 20.110 to KP 25.361**

NOTE: Kilometer Posts will refresh (start over) at county lines as Post Miles do currently.

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CHAPTER TWELVE

MAINTENANCE ACTIVITIES INTRODUCTION

TABLE OF CONTENTS

12.0	IMMS ACTIVITY STRUCTURE MODEL
12.1	GUIDE FOR USING MAINTENANCE ACTIVITY INSTRUCTIONS

ACTIVITY INSTRUCTIONS BY FAMILY (A-Y)

Note: This is “**Part Two**” of a two-part Maintenance Manual Volume 2.

Maintenance Manual Volume 2, “**Part One**” includes Chapter 1 through Chapter 11. Refer to Part One, for useful information, and to insure you are following all IMMS reporting requirements.

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12.0 IMMS ACTIVITY STRUCTURE MODEL

MAINTENANCE ACTIVITY CODING

The IMMS Activity has replaced the MMS Family Problem Structure that was recorded in MMSI.

The MMSI **HOW** code has been replaced by a wide variety of IMMS Activities, as shown in the E1 Family Problem sample below:

ACTIVITY	DESCRIPTION
E10001	INSPECTION
E10002	COMPLAINT INVESTIG
E10009	USA
E10010	MECHANICAL CONTROL
E10012	CHEMICAL CONTROL
E10013	BIOLOGICAL CONTROL
E10014	MANUAL CONTROL
E10015	RODENT CONTROL
E10016	THERMAL CONTROL
E10017	CULTURAL CONTROL
E10018	STRUCTURAL CONTROL

Additional details are also captured using special coding, including Priority code, Maintenance Type, Project codes, Special Designations, Contractor codes, and the Work Order Additional tab.

The MMSI **WHY** Code is now recorded in the IMMS Work Order in the **Maintenance Type** field. The MMSI **WHEN** Code is now recorded in IMMS Work Order in the **Priority** field. *See Chapter 4 of this manual, "Maintenance Levels of Service and Maintenance Type" for instructions regarding the Priority and Maintenance Type coding.*

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IMMS ACTIVITY STRUCTURE MODEL

Note: The Family Problem structure is different in some Families for staff that do not report in IMMS. See Chapter 7 of this manual, "Reporting in TOPSS".

FLEXIBLE PAVEMENT

A100XX	ROADBED
A110XX	RAMPS
A120XX	SHOULDERS

RIGID PAVEMENT

B100XX	ROADBED
B110XX	RAMPS
B120XX	SHOULDERS

SLOPES / DRAINAGE / VEGETATION

C1XXXX	LATERAL SUPPORT
C200XX	ROADSIDE VEGETATION
C300XX	ROADSIDE VEGETATION
C400XX	FENCES
C500XX	DITCHES / CHANNELS
C510XX	CURBS / DIKES
C600XX	CULVERT OPENINGS
C610XX	CULVERTS
C620XX	OVERSIDE DRAINS
C630XX	SLOTTED DRAINS
C640XX	DRAINAGE INLETS
C700XX	HORIZONTAL DRAINS
C710XX	UNDER DRAINS
C900XX	WALLS
C910XX	BIKE PATH
C920XX	SIDEWALKS
C930XX	CATTLEGAURD
C940XX	DRYWELL
C950XX	MANHOLES
C960XX	RADIATOR WATER SITE

LITTER / DEBRIS / GRAFFITI

D200XX	ROAD PATROL INSPECTION AND INVESTIGATION
D30000	EXPIRED (SEE F20XXX)
D401XX	LITTER AND DEBRIS
D50000	SPILLS
D60000	GRAFFITI
D90000	ILLEGAL SIGN REMOVAL

LANDSCAPING

E100XX	WEED CONTROL
E200XX	PRUNING / THINNING / REMOVING / REPLACING
E300XX	IRRIGATION

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IMMS ACTIVITY STRUCTURE MODEL (CONTINUED)

STORM WATER

F100XX	TRAINING / MEETINGS
F200XX	DRAINAGE / SWEEPING
F300XX	INSPECTION / REPAIR / REPLACE
F400XX	SOIL / SEDIMENT
F401XX	STOCKPILES
F402XX	SNOW HAULING
F500XX	EVAL / DEVELOP / VEG MGMT / NPDES PERMIT
F600XX	INVESTIGATION / OVERSIGHT REMOVE / CLEANUP
F700XX	STRUCTURAL BMP (BEST MANAGEMENT PRACTICE)
F800XX	OVERSIGHT OF CONSTRUCTION / CONTRACT
F900XX	DECENTRI FACILITY: INSPECTION / NPDES PERMIT / REPAIR / OPERATIONS

SERVICE FACILITIES

G100XX	ROADSIDE RESTS
G200XX	VISTA POINTS
G300XX	INSPECTION STATIONS
G4XXXX	PARK AND RIDES

BRIDGES

H100XX	SUBSTRUCTURE
H200XX	SUPERSTRUCTURE
H300XX	DECK
H310XX	APPROACH SLAB
H400XX	JOINTS
H410XX	BEARINGS
H500XX	RAILINGS
H600XX	DRAINAGE SYSTEMS
H700XX	PAINTING
H800XX	MECHANICAL / ELECTRICAL
H9XXXX	MISCELLANEOUS

OTHER STRUCTURES

J100XX	PUMP PLANTS
J200XX	TUNNELS
J300XX	FERRY BOATS
J400XX	SFOBB TERMINAL BLDG.
J50XXX	TOW SERV/ BICYCLE SHUTTLE
J600XX	CHANNELIZERS
J700XX	TOLL PLAZAS
J90110	CALIBRATE / TEST REPAIR EQUIPMENT

IMMS ACTIVITY STRUCTURE MODEL (CONTINUED)

ELECTRICAL

K10XXX	LIGHTING
K20XXX	SIGN LIGHTING
K40XXX	TRAFFIC SIGNALS
K50XXX	FLASHING BEACONS
K60XXX	RAMP METERS
K70XXX	TRAFFIC SURVEILLANCE (TOS) EQUIPMENT
K80XXX	TRAFFIC COUNTERS
K90XXX	MISCELLANEOUS

TRAFFIC GUIDANCE

M100XX	STRIPING
M200XX	MARKINGS
M300XX	PAVEMENT MARKERS
M40XXX	SIGNS
M410XX	SIGN STRUCTURES
M500XX	DELINIATORS
M600XX	GUARDRAILS
M700XX	MEDIAN BARRIER
M800XX	ATTENUATOR
M90XXX	MISCELLANEOUS

SNOW / ICE CONTROL

R100XX	SNOW
R200XX	SAND AND SALT
R300XX	SNOW POLES
R40000	CHAIN CONTROL
R50000	SUPPORT PERSONNEL
R90XXX	MISCELLANEOUS

STORM MAINTENANCE

S100XX	SAND / ROCK PATROL
S20XXX	STORM PATROL
S30XXX	MINOR SLIDES AND SLIPOUTS / STORM DAMAGE
S400XX	MAJOR SLIDE/SLIP REMOVE/REPAIR

SUPPORT

T30080	GENERAL OPERATIONS REGION
T40XXX	MAINTENANCE FACILITIES

IMMS ACTIVITY STRUCTURE MODEL (CONTINUED)

TRANING AND FIELD AUXILERY SERVICES

W1000X	LEGALLY MANDATED
W2000X	KINGVALE
W3000X	META
W4000X	OTHER TRAINING
W5000X	FIELD AUXILIRY SERVICES
W9000X	MISCELLANEOUS

WORK FOR OTHERS

Y10000	ASSIST MECHANIC
Y20000	SERVICING AND LEVEL 1 PM
Y30000	TRANSPORTING EQUIPMENT
Y40000	COMMUNICATION EQUIPMENT REPAIR
Y50XXX	PERMITS
Y9XXXX	MISCELLANEOUS

12.1 GUIDE FOR USING MAINTENANCE ACTIVITIES INSTRUCTIONS

Supervisors should be familiar with all Activities included in Families that are relevant to the type of work they perform. This will help insure the appropriate Activity is selected for each job.

The IMMS Activities are grouped by Family.

Prefacing each Family is a list of the Activities that are included with that Family. Please see the following example and explanation for each column below:

Column 1: The Activity

Column 2: Description

Column 3: Production Unit abbreviation as reflected in IMMS

Column 4: Production Unit spelled out

Column 5: Asset(s) which the Activity can be charged against

1	2	3	4	5
ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C20015	RODENT CONTROL	ACRE	Acre	RW
C20016	THERMAL CONTROL	ACRE	Acre	RW
C20017	CULTURAL CONTROL	ACRE	Acre	RW

Following the list that prefates each Family are instructions for each individual Activity, and in the order they appear on the list.

Each individual Activity instruction includes four components:

- **Production Unit** is the production unit increment in IMMS for that Activity.
- **Purpose** describes the type of maintenance work this Activity should be used for. Purpose also may provide direction on what type of work is NOT to be charged to that Activity.
- **Special Requirements** The main purpose of this section is instructions for special coding, such as Special Designations, Expenditure Authorizations, TRAMS Activity Code, Subjob, etc., that may be required with the use of that Activity. In some cases, this section also refers to policy that must be followed, or contact that must be made prior to beginning work.
Note: the Special Requirements section is not intended to include all required safety, regulatory agency, or Maintenance procedures and requirements associated with every Activity. Refer to the specific manual, policy(s), or authority to insure you are meeting requirements.
- **Production Unit Calculation** may include tips on how to determine the accurate amount of production units accomplished.

July 2006

ROADBED ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
A10001	INSPECTION A FAMILY	EAOC	Each Occurrence	RW
A10002	COMPLAINT INVESTIGATION A FAMILY	EAOC	Each Occurrence	RW
A10003	DIST 08 UNPAVED TRAVELWAY REPAIRS	EAOC	Each Occurrence	RW
A10009	USA A FAMILY	EAOC	Each Occurrence	RW
A10010	SEAL (Fog)	LAMI	Lane Miles	RW
A10012	SEAL (Sand)	LAMI	Lane Miles	RW
A10013	SEAL (Scrub)	LAMI	Lane Miles	RW
A10014	SEAL (Chip)	LAMI	Lane Miles	RW
A10015	SEAL (Slurry)	LAMI	Lane Miles	RW
A10016	SEAL (Micro)	LAMI	Lane Miles	RW
A10017	SEAL (Rejuvenator)	LAMI	Lane Miles	RW
A10020	CRACK SEAL	LAMI	Lane Miles	RW
A10030	PATCH POT HOLES	EACH	Each	RW
A10040	DIG OUT	SQYD	Square Yards	RW
A10050	PROFILE GRINDING	SQYD	Square Yards	RW
A10060	OVERLAY/LEVELING	SQYD	Square Yards	RW

RAMPS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
A11012	SEAL (Sand)	LAMI	Lane Miles	RW
A11013	SEAL (Scrub)	LAMI	Lane Miles	RW
A11014	SEAL (Chip)	LAMI	Lane Miles	RW
A11015	SEAL (Slurry)	LAMI	Lane Miles	RW
A11016	SEAL (Micro)	LAMI	Lane Miles	RW
A11017	SEAL (Rejuvenator)	LAMI	Lane Miles	RW
A11020	CRACK SEAL	LAMI	Lane Miles	RW
A11030	PATCH POT HOLES	EACH	Each	RW
A11040	DIG OUT	SQYD	Square Yards	RW
A11050	PROFILE GRINDING	SQYD	Square Yards	RW
A11060	OVERLAY/LEVELING	SQYD	Square Yards	RW

July 2006

SHOULDERS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
A12010	SEAL (Fog)	LAMI	Lane Miles	RW
A12012	SEAL (Sand)	LAMI	Lane Miles	RW
A12013	SEAL (Scrub)	LAMI	Lane Miles	RW
A12014	SEAL (Chip)	LAMI	Lane Miles	RW
A12015	SEAL (Slurry)	LAMI	Lane Miles	RW
A12016	SEAL (Micro)	LAMI	Lane Miles	RW
A12017	SEAL (Rejuvenator)	LAMI	Lane Miles	RW
A12020	CRACK SEAL	LAMI	Lane Miles	RW
A12030	PATCH POT HOLES	EACH	Each	RW
A12040	DIG OUT	SQYD	Square Yards	RW

RECORDING PAVEMENT RELATED WORK ACTIVITY

A Work Order should be associated with “a job”, and the post mile limits should be reflective of the actual work area. This can be very important for budgetary, environmental, and legal issues.

For pavement related work activity such as paving and crack sealing, this is critical in respect to insuring not to exceed expenditure limits for maintenance work by Maintenance forces, and for accurate tracking of preventative and corrective pavement maintenance.

One Work Order should not be used to record multiple work locations with a broad (all-inclusive) post mile range. Each work location should be given its own Work Order number.

Questions regarding this should be directed to your District IMMS Coordinator.

July 2006

A10001 – INSPECTION**A FAMILY**

Production Unit: Each occurrence

Purpose

Perform inspection of flexible roadbed to insure that travel way, ramps, or shoulder are in a safe and usable condition. To routinely monitor roadbed conditions to preserve the State's capital investment and maintain a riding quality satisfactory to the traveling public. Document and initiate development of work plans.

Special Requirements

Follow instructions and recommendation per Chapter 4, Maintenance Levels of Service and Maintenance Types.

Production Unit Calculation

Each occurrence. One count per county and route inspected.

A10002 – COMPLAINT INVESTIGATION**A FAMILY**

Production Unit: Each occurrence

Purpose

Specific investigations pertaining to complaints received. Verify and document.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

None

Production Unit Calculation

Each occurrence. One count per incident.

July 2006

A10009 – USA**A FAMILY****Production Unit:** Each occurrence**Purpose**

Before any digging or excavations are started, the area shall be checked to determine if there are any buried utilities. The Superintendent or supervisor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing any excavation with power tools. If the excavation will be conducted in an area which is known, or reasonably should be known, to contain Caltrans electrical facilities, the Superintendent or supervisor shall notify the Electrical Supervisor for the area, prior to commencing any excavation.

Special Requirements

None

Production Unit Calculation

Each occurrence. One count per location.

July 2006

A10010 – SEAL (FOG) FLEX LANE

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Comply with flush coat and ADT requirements, fog seal moratorium, and project cost constraints.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A10012 – SEAL (SAND) FLEX LANE

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Comply with flush coat and ADT requirements, fog seal moratorium, and project cost constraints.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A10013 – SEAL (SCRUB) FLEX LANE

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Comply with flush coat and ADT requirements, fog seal moratorium, and project cost constraints.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A10014 – SEAL (CHIP) FLEX LANE

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Comply with flush coat and ADT requirements, fog seal moratorium, and project cost constraints.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A10015 – SEAL (SLURRY) FLEX LANE

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Comply with flush coat and ADT requirements, fog seal moratorium, and project cost constraints.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A10016 – SEAL (MICRO) FLEX LANE

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Comply with flush coat and ADT requirements, fog seal moratorium, and project cost constraints.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A10017 – SEAL (REJUVENATOR) FLEX LANE

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Comply with flush coat and ADT requirements, fog seal moratorium, and project cost constraints.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A10020 – CRACK SEAL FLEX LANE

Production Unit: Lane miles

Purpose

Flexible pavement is susceptible to cracking. Cracks are generally attributable to the lack of base support, volume change in the asphalt mix because of temperature changes, and drying of the asphaltic concrete mix. Cracks should be repaired to prevent the entrance of moisture into the sub-grade.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Section A.19.

When using rubberized crack fillers, a Special Designation of “**MRUB**” must be used in IMMS.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane Miles

July 2006

A10030 – PATCH POT HOLES FLEX LANE

Production Unit: Each

Purpose

Potholes are a form of disintegration of the pavement that may be associated with cracking, base failure, or aging of the pavement. Potholes often appear after rain or during thaw periods when pavements are weaker. They must be repaired to maintain a riding quality satisfactory to the traveling public.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Section A.11.

When AC is placed using a method other than a paver, a Special Designation of “**MAC**” must be used in IMMS for routine maintenance, and **MMAC** must be used in IMMS for Major Maintenance.

The Special Designations listed above shall be used with all appropriate Activities in the “A” and “B” Families where asphalt concrete is used in quantities greater than ten tons.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Each

July 2006

A10040 – DIG OUT FLEX LANE

Production Unit: Square yards

Purpose

Digouts are used when the pavement has failed in localized areas to such an extent that even the underlying support materials have disintegrated, become infiltrated with water resulting in a loss of fine-grained material, or otherwise lost their load carrying capacity. Digouts consist of cutting the boundaries, breakup and removal of pavement material and affected base layers, placement and compaction of new base, application of tack coat, and placement of new pavement.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Section A.09.

When AC is placed where a grinder/planer has been used to dig out surface base, a Special Designation of “**MGRIND**” must be used in IMMS for routine maintenance, and “**MMGRIND**” for Major Maintenance.

Maintenance digout operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9

July 2006

A10050 – PROFILE GRINDING FLEX LANE

Production Unit: Square yards

Purpose

Irregular surfaces in asphalt pavement may be corrected by profile grinding, in order to improve ride quality, smooth dips and abrupt settlements.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Section A.13.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9

July 2006

A10060 – OVERLAY/LEVELING FLEX LANE

Production Unit: Square yards

Purpose

A maintenance overlay may be used to make the necessary repairs when pavement failure becomes extensive, over and beyond that requiring pothole or other small patches.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.03, A.10, and A.12.

SPECIAL DESIGNATION REQUIREMENTS

IMPORTANT NOTE: When a grinder is used in the operation, use MGRIND (routine maintenance) or MMGRIND (Major Maintenance). If grinder not used, use the appropriate Special Designation below:

When AC is placed using a State owned paver, a Special Designation of “**MCTPAVER**” must be used in IMMS for routine maintenance, and “**MMCTPAVER**” for Major Maintenance.

When AC is placed using a rented paver, a Special Designation of “**MRPAVER**” must be used in IMMS for routine maintenance, and “**MMRPAVER**” for Major Maintenance.

When AC is placed using a method other than a paver, a Special Designation of “**MAC**” must be used in IMMS for routine maintenance, and “**MMAC**” for Major Maintenance.

Maintenance overlay operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator.
(Example: "06MM04XX")

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9

July 2006

A11012 – SEAL (SAND) RAMPS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A11013 – SEAL (SCRUB) RAMPS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A11014 – SEAL (CHIP) RAMPS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A11015 – SEAL (SLURRY) RAMPS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A11016 – SEAL (MICRO) RAMPS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A11017 – SEAL (REJUVENATOR) RAMPS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A11020 – CRACK SEAL RAMPS

Production Unit: Lane miles

Purpose

Flexible pavement is susceptible to cracking. Cracks are generally attributable to the lack of base support, volume change in the asphalt mix because of temperature changes, and drying of the asphaltic concrete mix. Cracks should be repaired to prevent the entrance of moisture into the sub-grade.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Section A.19.

When using rubberized crack fillers, a Special Designation of “**MRUB**” must be used in IMMS.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A11030 – PATCH POT HOLES RAMPS

Production Unit: Each

Purpose

Potholes are a form of disintegration of the pavement that may be associated with cracking, base failure, or aging of the pavement. Potholes often appear after rain or during thaw periods when pavements are weaker. They must be repaired to maintain a riding quality satisfactory to the traveling public.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Section A.11.

When AC is placed using a method other than a paver, a Special Designation of “**MAC**” must be used in IMMS.

The Special Designation listed above shall be used with all appropriate Activities in the “A” and “B” Families where asphalt concrete is used in quantity greater than ten tons.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Each

July 2006

A11040 – DIG OUT RAMPS

Production Unit: Square yards

Purpose

Digouts are used when the pavement has failed in localized areas to such an extent that even the underlying support materials have disintegrated, become infiltrated with water resulting in a loss of fine-grained material, or otherwise lost their load carrying capacity. Digouts consist of cutting the boundaries, breakup and removal of pavement material and affected base layers, placement and compaction of new base, application of tack coat, and placement of new pavement.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Section A.09.

When AC is placed where a grinder/planer has been used to dig out surface base, a Special Designation of “**MGRIND**” must be used in IMMS for routine maintenance, and “**MMGRIND**” for Major Maintenance.

Maintenance digout operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator.
(Example: "06MM04XX")

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9

July 2006

A11050 – PROFILE GRINDING RAMPS

Production Unit: Square yards

Purpose

Irregular surfaces in asphalt pavement may be corrected by profile grinding in order to improve ride quality, smooth dips, and abrupt settlements.

Special Requirements

Follow instructions and recommendation per Chapter 4, Maintenance Levels of Service and Maintenance Types.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9

July 2006

A11060 – OVERLAY/LEVELING RAMPS

Production Unit: Square yards

Purpose

A Maintenance overlay may be used to make the necessary repairs when pavement failure becomes extensive, over and beyond that requiring pothole or other small patches.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.03, A.10, and A.12.

SPECIAL DESIGNATION REQUIREMENTS

IMPORTANT NOTE: When a grinder is used in the operation, use MGRIND (routine maintenance) or MMGRIND (Major Maintenance). If grinder not used, use the appropriate Special Designation below:

When AC is placed using a State owned paver, a Special Designation of “**MCTPAVER**” must be used in IMMS for routine maintenance, and “**MMCTPAVER**” for Major Maintenance.

When AC is placed using a rented paver, a Special Designation of “**MRPAVER**” must be used in IMMS for routine maintenance, and “**MMRPAVER**” for Major Maintenance.

When AC is placed using a method other than a paver, a Special Designation of “**MAC**” must be used in IMMS for routine maintenance, and “**MMAC**” for Major Maintenance.

Maintenance overlay operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9

July 2006

A12010 – SEAL (FOG) SHOULDERS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for the policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A12012 – SEAL (SAND) SHOULDERS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A12013 – SEAL (SCRUB) SHOULDERS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A12014 – SEAL (CHIP) SHOULDERS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A12015 – SEAL (SLURRY) SHOULDERS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A12016 – SEAL (MICRO) SHOULDERS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A12017 – SEAL (REJUVENATOR) SHOULDERS

Production Unit: Lane miles

Purpose

Seal coats may be required on asphalt pavement when the pavement shows signs of: (a) raveling or erosion, (b) oxidation, (c) permeable surface, or (d) slipperiness.

A continuous seal should be considered when raveling and checking becomes general, or the surface of an asphalt pavement becomes permeable to water.

Special Requirements

The number of “square yards” completed for each day’s work must be entered in the Spot Inspection tab.

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Sections A.15 through A.18.

Maintenance seal coat operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane miles

July 2006

A12020 – CRACK SEAL SHOULDERS

Production Unit: Lane miles

Purpose

Flexible pavement is susceptible to cracking. Cracks are generally attributable to the lack of base support, volume change in the asphalt mix because of temperature changes, and drying of the asphaltic concrete mix. Cracks should be repaired to prevent the entrance of moisture into the sub-grade.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Section A.19.

When using rubberized crack fillers, a Special Designation of “**MRUB**” must be used in IMMS.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9 ÷ 7040 = Lane Miles

July 2006

A12030 – PATCH POT HOLES SHOULDERS

Production Unit: Each

Purpose

Potholes are a form of disintegration of the pavement that may be associated with cracking, base failure, or aging of the pavement. Potholes often appear after rain or during thaw periods when pavements are weaker. They must be repaired to maintain a riding quality satisfactory to the traveling public.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Section A.11.

When AC is placed using a method other than a paver, a Special Designation of “**MAC**” must be used in IMMS.

The Special Designations listed above shall be used with all appropriate Activities in the “A” and “B” Families where asphalt concrete is used in quantities greater than ten tons.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Each

July 2006

A12040 – DIG OUT SHOULDERS

Production Unit: Square yards

Purpose

Digouts are used when the pavement has failed in localized areas to such an extent that even the underlying support materials have disintegrated, become infiltrated with water resulting in a loss of fine-grained material, or otherwise lost their load carrying capacity. Digouts consist of cutting the boundaries, breakup and removal of pavement material and affected base layers, placement and compaction of new base, application of tack coat, and placement of new pavement.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume I, Chapter A, Section A.09.

When AC is placed where a grinder/planer has been used to dig out surface base, a Special Designation of “**MGRIND**” must be used in IMMS for routine maintenance, and “**MMGRIND**” for Major Maintenance.

Maintenance digout operations should be planned in the district's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume I, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “A” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9

July 2006

ROADBED ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
B10001	INSPECTION RIGID LANE	EAOC	Each Occurrence	RW
B10002	COMPLAINT INVESTIGATION RIGID	EAOC	Each Occurrence	RW
B10009	USA RIGID LANE	EAOC	Each Occurrence	RW
B10020	CRACK SEAL RIGID LANE	LAMI	Lane Miles	RW
B10030	PATCH SPALLS RIGID LANE	EACH	Each	RW
B10050	PROFILE GRINDING RIGID LANE	SQYD	Square Yard	RW
B10060	OVERLAY/LEVELING RIGID LANE	SQYD	Square Yard	RW
B10070	SLAB REPLACEMENT RIGID LANE	SQYD	Square Yard	RW
B10080	MUD JACKING RIGID LANE	EACH	Each	RW
B10090	SUB SEALING RIGID LANE	EACH	Each	RW

RAMPS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
B11030	PATCH POTHOLE/ SPALLS RIGID	EACH	Each	RW

RECORDING OF PAVEMENT RELATED WORK ACTIVITY

A Work Order should be associated with “a job”, and the post mile limits should be reflective of the actual work area. This can be very important for budgetary, environmental, and legal issues.

For pavement related work activity such as paving and crack sealing, this is critical in respect to insuring not to exceed expenditure limits for maintenance work by Maintenance forces, and for accurate tracking of preventative and corrective pavement maintenance.

One Work Order should not be used to record multiple work locations with a broad (all-inclusive) post mile range. Each work location should be given its own Work Order number.

Questions regarding this should be directed to your District IMMS Coordinator.

July 2006

B10001 – INSPECTION B FAMILY

Production Unit: Each occurrence

Purpose

Perform inspection of rigid roadbed, ramps, or shoulders to insure that travel way is in a safe and usable condition. To routinely monitor roadbed conditions to preserve the state's capital investment and maintain a riding quality satisfactory to the traveling public. Document and initiate development of work plans.

Special Requirements

Follow instructions and recommendation per Chapter 4, Maintenance Levels of Service and Maintenance Types.

Production Unit Calculation

Each occurrence. One count per county and route inspected.

B10002 – COMPLAINT INVESTIGATION B FAMILY

Production Unit: Each occurrence

Purpose

Specific investigations pertaining to complaints received. Verify and document.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed

Special Requirements

None

Production Unit Calculation

Each occurrence. One count per incident.

July 2006

B10009 – USA**B FAMILY****Production Unit:** Each occurrence**Purpose**

Before any digging or excavations are started, the area shall be checked to determine if there are any buried utilities. The Superintendent or supervisor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing any excavation with power tools. If the excavation will be conducted in an area which is known, or reasonably should be known, to contain Caltrans electrical facilities, the Superintendent or supervisor shall notify the Electrical Supervisor for the area, prior to commencing any excavation.

Special Requirements

None

Production Unit Calculation

Each occurrence. One count per location.

July 2006

B10020 – CRACK SEAL RIGID LANE

Production Unit: Lane miles

Purpose

Cracks require sealing to prevent moisture and incompressible infiltration. The orientation and type of crack dictates sealing necessity. Cracking in concrete pavement initiates by one or a combination of seven factors:

1. Plastic Shrinkage
2. Drying Shrinkage
3. Restrained Thermal Contraction
4. Thermal & Moisture Gradients
5. Non-uniform Support
6. Reflection of Underlying Distress
7. Load

Once started, a crack may develop full-depth through a slab or traverse only partial depth. The crack may also begin moving and functioning as a joint. A crack that functions as a joint is a “working” crack.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume 1, Chapter B, Section B.02 (B).

When using rubberized crack fillers, a Special Designation of “**MRUB**” must be used in IMMS.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “B” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (ft) X Width (ft) ÷ 9 ÷ 7040 = Lane Miles

July 2006

B10030 – PATCH SPALLS RIGID LANE

Production Unit: Each

Purpose

PCC partial depth repair is a technique that restores localized surface distress, such as spalling at joints and/or cracks in the upper one-third to one-half of a concrete pavement. Surface spalls create a rough ride and can accelerate development of further problems. Partial depth patches replace unsound concrete, restore the rideability of the pavement, deter further deterioration, and provide suitable edges for effective joint and crack resealing.

AC potholes are a form of disintegration of the pavement that may be associated with cracking, base failure, or aging of the pavement. Potholes often appear after rain or during thaw periods when pavements are weaker. They must be repaired to maintain a riding quality satisfactory to the traveling public.

Special Requirements

PCC: Follow instructions and recommendation per Maintenance Manual Volume 1, Chapter B, Section B.02 (D).

AC: Follow instructions and recommendation per Maintenance Manual Volume 1, Chapter A, Section A.11.

When AC is placed using a method other than a paver, a Special Designation of “**MAC**” must be used in IMMS for routine maintenance, and **MMAC** must be used in IMMS for Major Maintenance.

The Special Designations listed above shall be used with all appropriate activities in the A and B Families where asphalt concrete is used in quantity greater than ten tons.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “B” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Each

July 2006

B10050 – PROFILE GRINDING RIGID LANE

Production Unit: Square yards

Purpose

Diamond grinding is a procedure used to restore or improve pavement ride quality and surface texture. Regrinding a pavement up to three (3) times is possible without significantly compromising its fatigue life. Diamond grinding helps concrete pavements last far longer than their initial design lives. It can remove bumps from new pavements, re-profile rough lanes, and smooth a pavement surface.

Profile grinding on PCC has been done with special attachments to State grinders in some districts.

Special Requirements

Follow instructions and recommendation per Maintenance Manual Volume 1, Chapter B, Section B.12.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “B” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9

July 2006

B10060 – OVERLAY/LEVELING RIGID LANE

Production Unit: Square yards

Purpose

A Maintenance overlay may be used to make the necessary repairs when pavement failure becomes extensive. Maintenance overlays should be planned in the District's Major Maintenance Program.

Special Requirements

Refer to the Maintenance Manual Volume 1, Chapter A, Section A.03 for policy on Major Maintenance projects.

SPECIAL DESIGNATION REQUIREMENTS

IMPORTANT NOTE: When a grinder is used in the operation, use MGRIND (routine maintenance) or MMGRIND (Major Maintenance). If grinder not used, use the appropriate Special Designation below:

When AC is placed using a State owned paver, a Special Designation of “MCTPAVER” must be used in IMMS for routine maintenance, and “MMCTPAVER” for Major Maintenance.

When AC is placed using a rented paver, a Special Designation of “MRPAVER” must be used in IMMS for routine maintenance, and “MMRPAVER” for Major Maintenance.

When AC is placed using a method other than a paver, a Special Designation of “MAC” must be used in IMMS for routine maintenance, and “MMAC” for Major Maintenance.

Maintenance overlays should be planned in the District's Major Maintenance Program (projects > \$60,000). Refer to the Maintenance Manual Volume 1, Chapter A, Section A.03 for policy on Major Maintenance projects. For Major Maintenance, a nine (9) digit IMMS Project Number must be requested from the District Major Maintenance Coordinator. (Example: "06MM04XX").

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “B” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9

July 2006

B10070 – SLAB REPLACEMENT RIGID LANE

Production Unit: Square yards

Purpose

Full depth repair or full depth patching entails removing and replacing at least a portion of a slab to the bottom of the concrete in order to restore areas of deterioration. Full depth repairs can improve pavement rideability and structural integrity, and can extend pavement service life. Joint deterioration includes any cracking, breaking, or spalling of slab edges on either side of a transverse or longitudinal joint. It is the most common distress that requires full depth repair. It is the below surface spalling and cracking that requires full depth replacement. If there is no obvious durability problem, coring is necessary to determine if deterioration exists below the slab surface.

Special Requirements

Refer to Maintenance Manual Volume 1, Chapter A, Section A.03 for policy on Major Maintenance projects.

Repair materials need be comparable in strength and volume stability to the concrete in the existing slab.

The preferred repair option is to place Rapid Strength Concrete. Refer to Caltrans SSP 40-020.

If Asphalt is used as short-term fix, AR8000 or AR16000 should be used.

When AC is placed using a method other than a paver, a Special Designation of “**MAC**” must be used in IMMS for routine maintenance, and “**MMAC**” for Major Maintenance.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “B” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Length (feet) X Width (feet) ÷ 9

July 2006

B10080 – MUD JACKING RIGID LANE

Production Unit: Each

Purpose

Mudjacking may be used to re-establish the base under PCC slabs without removing the slabs. In addition to base reinforcement, sunken slabs may sometimes be raised to grade by this method. Mudjacking literally replaces lost or sunken base material by pumping a portland cement grout underneath the slab. The grout is pumped through holes drilled into the slab at required intervals. Special pumping equipment is needed for this purpose.

Special Requirements

None

Production Unit Calculation

Each slab

B10090 – SUB SEALING RIGID LANE

Production Unit: Each

Purpose

Cavities under sunken or moving slabs may be filled by subsealing with asphalt. This practice has not been used often in past years. However, if it is determined that this method should be used, consult the District Materials Lab for specification and advice regarding Caltrans Maintenance practice.

Special Requirements

Consult the District Materials Lab for specification and advice regarding Caltrans Maintenance practice.

Production Unit Calculation

Each slab

July 2006

B11030 – PATCH SPALLS RIGID RAMP

Production Unit: Each

Purpose

PCC partial depth repair is a technique that restores localized surface distress, such as spalling at joints and/or cracks in the upper one-third to one-half of a concrete pavement. Surface spalls create a rough ride and can accelerate development of further problems. Partial depth patches replace unsound concrete, restore the rideability of the pavement, deter further deterioration, and provide suitable edges for effective joint and crack resealing.

AC potholes are a form of disintegration of the pavement that may be associated with cracking, base failure, or aging of the pavement. Potholes often appear after rain or during thaw periods when pavements are weaker. They must be repaired to maintain a riding quality satisfactory to the traveling public.

Special Requirements

PCC: Follow instructions and recommendation per Maintenance Manual Volume 1, Chapter B, Section B.02 (D).

AC: Follow instructions and recommendation per Maintenance Manual Volume 1, Chapter A, Section A.11.

When AC is placed using a method other than a paver, a Special Designation of “**MAC**” must be used in IMMS for routine maintenance, and **MMAC** must be used in IMMS for Major Maintenance.

The Special Designations listed above shall be used with all appropriate Activities in the “A” and “B” Families where asphalt concrete is used in quantity greater than ten tons.

Note: Each work location should be assigned a Work Order number. (See “Recording of pavement related work activity” on Page 2 of these “B” Family instructions). Material should be charged to the Work Order each day.

Production Unit Calculation

Each

July 2006

LATERAL SUPPORT ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C12000	LATERAL SUPPORT - NATIVE MATL	LIMI	Linear Miles	RW
C12010	LATERAL SUPPORT - IMPORT MATL	LIMI	Linear Miles	RW

ROADSIDE VEGETATION ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C20001	INSPECTION – C FAMILY	VEMI	Vehicle Miles	RW
C20002	COMPLAINT INVESTIGATION - C FAMILY	EAOC	Each Occurrence	RW
C20009	USA - C FAMILY	EAOC	Each Occurrence	RW
C20010	MECHANICAL CONTROL	ACRE	Acre	RW
C20011	STRUCTURAL CONTROL	ACRE	Acre	RW
C20012	CHEMICAL CONTROL	ACRE	Acre	RW
C20013	BIOLOGICAL CONTROL	ACRE	Acre	RW
C20014	MANUAL CONTROL	ACRE	Acre	RW
C20015	RODENT CONTROL	ACRE	Acre	RW
C20016	THERMAL CONTROL	ACRE	Acre	RW
C20017	CULTURAL CONTROL	ACRE	Acre	RW
C30001	TREE INSPECTION	VEMI	Vehicle Miles	RW
C30010	BRUSH CONTROL	LIMI	Linear Miles	RW
C30011	TREE TRIMMING	EA	Each	APP,FAC,RW
C30030	REMOVE BRUSH	EA	Each	RW
C30031	REMOVE TREE	EA	Each	RW
C30032	STUMP GRINDING	EA	Each	RW

FENCES ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C40010	REPAIR/REPLACE - FENCE	FT	Feet	RW
C40011	REPAIR/REPLACE - GATE	EA	Each	RW
C40020	DAY LABOR - FENCE	FT	Feet	RW

July 2006

DITCHES AND CHANNELS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C50010	REPAIR/REPLACE	LF	Linear Feet	RW
C50020	DAY LABOR	LF	Linear Feet	RW
C50050	CLEAN	LF	Linear Feet	RW

CURBS AND DIKES ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C51010	REPAIR/REPLACE	LF	Linear Feet	RW
C51020	DAY LABOR	LF	Linear Feet	RW
C51050	CLEAN	LF	Linear Feet	RW
C51070	SEAL	LF	Linear Feet	RW

CULVERT OPENINGS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C60003	TEST/SAMPLE	SAMP	Sample	RW
C60004	TAG/LOCATE	EA	Each	RW
C60010	REPAIR/REPLACE OPENING	EA	Each	RW
C60020	DAY LABOR	EA	Each	RW
C60050	CLEAN	EA	Each	RW

CULVERTS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C61001	INSPECTION – DRAINAGE FACILITY	EA	Each	RW
C61010	REPAIR/REPLACE	EA	Each	RW
C61050	CLEAN	EA	Each	RW

OVERSIDE DRAINS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C62010	REPAIR/REPLACE	EA	Each	RW
C62050	CLEAN	EA	Each	RW

July 2006

SLOTTED DRAINS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C63010	REPAIR/REPLACE	EA	Each	RW
C63050	CLEAN	EA	Each	RW

DRAINAGE INLETS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C64010	REPAIR/REPLACE	EA	Each	RW
C64050	CLEAN	EA	Each	RW

HORIZONTAL DRAINS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C70004	TAG/LOCATE	EA	Each	RW
C70010	REPAIR/REPLACE	EA	Each	RW
C70020	DAY LABOR	EA	Each	RW
C70050	CLEAN	EA	Each	RW

UNDER DRAINS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C71004	TAG/LOCATE	EA	Each	RW
C71010	REPAIR/REPLACE	EA	Each	RW
C71020	DAY LABOR	EA	Each	RW
C71050	CLEAN	EA	Each	RW

WALLS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C90010	REPAIR/REPLACE	SQFT	Square Feet	RW
C90011	REPAIR/REPLACE ACCESS OPENING	EA	Each	RW

BIKE PATH ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C91010	REPAIR/REPLACE	SQFT	Square Feet	RW
C91011	MARKINGS REPAIR/REPLACE	SQFT	Square Feet	RW
C91020	SWEEPING	LF	Linear Feet	RW
C91030	LITTER/DEBRIS REMOVAL	CUYD	Cubic Yard	RW

July 2006

SIDEWALK ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C92010	REPAIR/REPLACE	SQFT	Square Feet	RW
C92050	CLEAN	LF	Linear Feet	RW

CATTLEGUARD ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C93010	REPAIR/REPLACE	EA	Each	RW
C93020	DAY LABOR	EA	Each	RW
C93021	SEASONAL WING INSTALL	EA	Each	RW
C93050	CLEAN	EA	Each	RW
C93060	PAINT	EA	Each	RW

DRYWELL ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C94003	TEST/SAMPLE	SAMP	Sample	RW
C94004	TAG/LOCATE	EA	Each	RW
C94010	REPAIR/REPLACE	EA	Each	RW
C94020	DAY LABOR	EA	Each	RW
C94050	CLEAN	EA	Each	RW

MANHOLES ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C95003	TEST/SAMPLE	SAMP	Sample	RW
C95010	REPAIR/REPLACE	EA	Each	RW
C95020	DAY LABOR	EA	Each	RW
C95050	CLEAN	EA	Each	RW

RADIATOR WATER SITE ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
C96010	REPAIR REPLACE	EA	Each	RW
C96050	CLEAN/REFILL	EA	Each	RW

July 2006

C12000 – LATERAL SUPPORT - NATIVE MATERIAL

LATERAL SUPPORT

Production Unit: Linear miles

Purpose

Charge to this Activity when moving **native** material next to the pavement edge for pavement support. Repairs should be made to prevent loss of lateral support, and should be scheduled when the support has diminished to approximately one-half the pavement thickness.

Special Requirements

None

Production Unit Calculation

Linear mile repaired.

C12010 – LATERAL SUPPORT - IMPORT MATERIAL

LATERAL SUPPORT

Production Unit: Linear miles

Purpose

Charge to this Activity when moving **imported** material next to the pavement edge for pavement support. Repairs should be made to prevent loss of lateral support and should be scheduled when the support has diminished to approximately one-half the pavement thickness.

Special Requirements

Refer to Caltrans *Standard Specifications*, Section 26, for shoulder backing material.

Production Unit Calculation

Linear mile repaired.

July 2006

C20001 – INSPECTION

“C” Family

Production Unit: Vehicle miles

Purpose

Perform routine inspections undiscovered work, completed work, or any other condition that would require inspection related to the “C” Family.

Do not use for:

- Complaint Investigation (see Activity C20002).
- Tree inspection (see Activity C30001).
- Routine and annual inspections of drainage facilities (see Activity C61001).
- Culvert Inspection Program (see Activity C61001).

Special Requirements

None

Production Unit Calculation

Vehicle miles driven inspecting. Do not charge travel time to and from inspected area as production. Charge travel time to support on the Additional tab.

July 2006

C20002 – COMPLAINT INVESTIGATION

“C” Family

Production Unit: Each occurrence

Purpose

This Activity should be used for investigating complaints related to the “C” Family. Responding to a complaint requires investigation to determine what action, if any, is necessary to resolve the complaint, and how best to respond to the people making the complaint.

Charge time spent investigating the complaint to this Activity. This includes, but is not limited to, calling or meeting with the complaining party, travel time investigating, time spent reviewing the complaint site, and writing/e-mailing the response to the complaint.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

None

Production Unit Calculation

Each complaint investigated.

C20009 – USA

“C” Family

Production Unit: Each occurrence

Purpose

Underground Service Alert (USA) must be notified in advance when digging, boring, and trenching, etc. deeper than 6 inches. Charge time spent obtaining USA clearance to this Activity.

Special Requirements

None

Production Unit Calculation

Each occurrence

July 2006

C20010 – MECHANICAL CONTROL

Production Unit: Acre

Purpose

Caltrans controls vegetation on State highway roadsides to ensure visibility for safety, provide fire-risk management, and protect pavement surfaces, control noxious weeds, clear drainage facilities, and for aesthetics.

It is Caltrans policy to control vegetation on the roadside using an Integrated Vegetation Management (IVM) treatment. Mechanical control is one of the IVM methods.

Charge to this Activity when utilizing a mechanical method of control, including mowing with a rear or side mounted flail, rotary, gang, slope, or any tractor-powered mower.

Do not charge to this Activity for mowing with a walk behind mower, string trimmer or any other hand held power equipment. Charge these work activities to C20014. Charge mowing brush to C30010.

Do not charge to this Activity for vegetation control activities specifically to restore hydraulic capacity of drainage facilities. Charge to the appropriate drainage Activity (C50050, C51050, C60050, etc.).

Special Requirements

If mowing for noxious or invasive weeds, use the Special Designations for noxious weeds. See the last page of these “C” Family Activity instructions “Caltrans Special Designation Numbers: Plant and Insect Control”.

There are areas on the roadside that should not be mowed or have other mechanical method requirements. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting “VEGCON reports” under the “Asset” tab and choosing “VEGCON-Sensitive Area Report”. Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8’ wide by 1 mile long is approximately one acre.

July 2006

C20011 – STRUCTURAL CONTROL

Production Unit: Acre

Purpose

Caltrans controls vegetation on State highway roadsides to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and improve aesthetics.

Caltrans' policy is to control vegetation on the roadside using an Integrated Vegetation Management (IVM) treatment. Structural control is one of the IVM methods.

Charge to this Activity when utilizing a structural control method, including slope paving, riprap, or rock cobble placement, and weed control mats around guardrail.

Do not charge to this Activity when performing vegetation control activities specifically to restore hydraulic capacity of drainage facilities. Charge to the appropriate drainage Activity (C50050, C51050, C60050, etc.).

Special Requirements

If controlling noxious or invasive weeds, use the Special Designations for noxious weeds documented in the last page of these "C" Family Activity instructions, "Caltrans Special Designation Numbers: Weed and Insect Control."

There are areas on the roadside that are sensitive and require special treatment. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2006

C20012 – CHEMICAL CONTROL ROADSIDE VEGETATION

Production Unit: Acre

Purpose

Caltrans controls vegetation on State highway roadsides to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and improve aesthetics.

Caltrans' policy is to control vegetation on the roadside using an Integrated Vegetation Management (IVM) treatment. Chemical control is one of the IVM methods.

Charge to this Activity when spraying herbicides, insecticides, or plant growth regulators, applying granular herbicides or insecticides, or using any other form of chemical control for weed and brush control.

Do not charge to this Activity for chemical rodent control (most rodent baits are chemical). (See C20015).

Do not charge to this Activity when performing vegetation control activities specifically to restore hydraulic capacity of drainage facilities. Charge to the appropriate drainage Activity (C50050, C51050, C60050, etc.).

Special Requirements

A Pest Control Advisor's Recommendation from the District Landscape Specialist must be obtained before applying pesticides on Caltrans right of way.

Applicators must wear proper personal protective equipment and have completed Pesticide Safety Training prior to applying herbicides.

If controlling noxious or invasive weeds, use the Special Designations for noxious weeds. See the last page of these "C" Family Activity instructions "Caltrans Special Designation Numbers: Weed and Insect Control".

There are areas on the roadside that are sensitive and require special treatment. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

WORK ORDERS WHICH INCLUDE CHEMICAL USAGE MUST BE COMPLETED / CLOSED DAILY.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2006

C20013 – BIOLOGICAL CONTROL ROADSIDE VEGETATION

Production Unit: Acre

Purpose

Biological Control is any activity of one species (natural enemy) that reduces the adverse effects of another species (pests and weeds).

Caltrans controls vegetation on State highway roadsides to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and improve aesthetics.

Caltrans' policy is to control vegetation on the roadside using an Integrated Vegetation Management (IVM) treatment. Biological control is one of the IVM methods.

Charge to this Activity when spreading beneficial insects for vegetation or insect control, spraying *Bacillus thuringiensis* (B.T.) for caterpillar control, herding goats for vegetation control, or any other form of biological vegetation or insect control on the roadside.

Do not charge to this Activity when performing vegetation control activities specifically to restore hydraulic capacity of drainage facilities. Charge to the appropriate drainage Activity (C50050, C51050, C60050, etc.).

Special Requirements

If controlling noxious or invasive weeds, use the Special Designations for noxious weeds. Documented on the last page of these "C" Family Activity instructions, "Caltrans Special Designation Numbers: Weed and Insect Control".

There are areas on the roadside that are sensitive and require special treatment. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

WORK ORDERS WHICH INCLUDE CHEMICAL USAGE MUST BE COMPLETED / CLOSED DAILY.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2006

C20014 – MANUAL CONTROL ROADSIDE VEGETATION

Production Unit: Acre

Purpose

Caltrans controls vegetation on State highway roadsides to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and improve aesthetics.

Caltrans policy is to control vegetation on the roadside using an Integrated Vegetation Management (IVM) treatment. Manual control is one of the IVM methods.

Charge to this Activity when hand pulling, hoeing, whipping weeds, hand trimming, pruning, or shaping roadside shrubs. Using handheld power tools such as string trimmers, walk behind mowers, and chain saws to control roadside vegetation is also charged to this Activity.

Do not charge to this Activity when performing vegetation control activities specifically to restore hydraulic capacity of drainage facilities. Charge to the appropriate drainage Activity (C50050, C51050, C60050, etc.).

Special Requirements

If controlling noxious or invasive weeds use the Special Designations for noxious weeds, see the last page of these “C” Family Activity instructions “Caltrans Special Designation Numbers: Plant and Insect Control”.

There are areas on the roadside that are sensitive and require special treatment. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting “VEGCON reports” under the “Asset” tab and choosing “VEGCON-Sensitive Area Report”. Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8’ wide by 1 mile long is approximately one acre.

July 2006

C20015 – RODENT CONTROL ROADSIDE VEGETATION

Production Unit: Acre

Purpose

Corrective actions should be taken where the health of native trees and shrubs and the preservation of our facilities are adversely affected by rodent infestations. Corrective actions should also be taken when the infestations create a significant nuisance to the traveling public or adjacent landowner.

Charge to this Activity when placing rodent baits, setting traps, or performing any other method of rodent control.

Special Requirements

A Pest Control Advisor's Recommendation from the District Landscape Specialist must be obtained before applying pesticides (most rodents bait are chemical pesticides) on Caltrans right of way. Consult with the District Landscape Specialist before applying bait.

Applicators must wear proper personal protective equipment and have completed Pesticide Safety Training prior to applying pesticides.

There are areas on the roadside that are sensitive and require special treatment. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

**WORK ORDERS WHICH INCLUDE CHEMICAL USAGE MUST BE COMPLETED /
CLOSED DAILY.**

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2006

C20016 – THERMAL CONTROL

Production Unit: Acre

Purpose

Caltrans controls vegetation on State highway roadsides to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and improve aesthetics.

Caltrans' policy is to control vegetation on the roadside using an Integrated Vegetation Management (IVM) treatment. Thermal control is one of the IVM methods.

Thermal control methods include flaming, steam, solarization, and controlled or prescribed burning. Caltrans predominantly uses controlled burning.

Charge this Activity when utilizing a thermal method for control of weeds or brush.

Do not charge to this Activity when performing vegetation control activities specifically to restore hydraulic capacity of drainage facilities. Charge to the appropriate drainage Activity (C50050, C51050, C60050, etc.).

Special Requirements

A fire plan and local permits may be required before Caltrans can burn vegetation on the roadside

If controlling noxious or invasive weeds, use the Special Designations for noxious weeds documented in the last page of these "C" Family Activity instructions, "Caltrans Special Designation Numbers: Weed and Insect Control".

There are areas on the roadside that are sensitive and require special treatment. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2006

C20017 – CULTURAL CONTROL

Production Unit: Acre

Purpose

Caltrans controls vegetation on State highway roadsides to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and improve aesthetics.

Caltrans' policy is to control vegetation on the roadside using an Integrated Vegetation Management (IVM) treatment. Cultural control is one of the IVM methods.

Cultural methods include applying mulch, selecting proper plant, and implementing irrigation and fertilization techniques.

Charge to this Activity when utilizing a cultural method for control of weeds or brush.

Do not charge to this Activity when performing vegetation control activities specifically to restore hydraulic capacity of drainage facilities. Charge to the appropriate drainage Activity (C50050, C51050, C60050, etc.).

Special Requirements

If controlling noxious or invasive weeds, use the Special Designations for noxious weeds documented in the last page of these "C" Family Activity instructions, "Caltrans Special Designation Numbers: Weed and Insect Control".

There are areas on the roadside that are sensitive and require special treatment. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2006

C30001 – TREE INSPECTION ROADSIDE VEGETATION

Production Unit: Vehicle miles

Purpose

Visual surveillance should be ongoing to detect trees and limbs, which may be hazardous to traffic, pedestrians, highway appurtenances, or adjacent property. Trees disturbed by new construction, with obvious structural deficiencies, or showing signs of disease may require a thorough inspection to determine appropriate action.

Charge to this Activity when the main reason for the inspection is to determine tree health and condition.

Special Requirements

None

Production Unit Calculation

Vehicle miles driven while actively inspecting. Do not charge travel time to and from inspected area as production. Charge travel time to support on the Additional tab.

July 2006

C30010 – BRUSH CONTROL ROADSIDE VEGETATION

Production Unit: Linear miles

Purpose

Woody perennial plants, seedling trees, and vines naturally encroach on the roadway. They need to be controlled for the same reasons as weeds and grass vegetation.

Charge to this Activity when cutting back brush by hand, or by using hand held power tools, brush mowers, or any other type of power equipment.

Do not charge to this Activity when performing vegetation control activities specifically to restore hydraulic capacity of drainage facilities. Charge to the appropriate drainage Activity (C50050, C51050, C60050, etc.).

Special Requirements

If controlling noxious or invasive weeds, use the Special Designations for noxious weeds. See the last page of these “C” Family Activity instructions “Caltrans Special Designation Numbers: Weed and Insect Control”.

There are areas on the roadside that are sensitive and require special treatment. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting “VEGCON reports” under the “Asset” tab and choosing “VEGCON-Sensitive Area Report”. Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Linear mile of brush controlled.

July 2006

C30011 – TREE TRIMMING ROADSIDE VEGETATION

Production Unit: Each

Purpose

Highway trees are to be maintained in a safe and aesthetic manner at all times. Only the best methods of arboricultural shall be used, consistent with the practices outlined in the ANSI A300-1995 standard, and the ISA tree pruning guidelines.

A tree is a woody perennial plant with a diameter of 4 inches or greater (when measured 4 feet from the ground), and has a total height greater than 20 feet.

Charge to this Activity when climbing or working from the ground to trim, prune, and shape trees.

Special Requirements

Only qualified tree trimmers or trainees are to climb in trees to perform work.

There are areas on the roadside that are sensitive and require special treatment. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting “VEGCON reports” under the “Asset” tab and choosing “VEGCON-Sensitive Area Report”. Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Each tree trimmed.

July 2006

C30030 – REMOVE BRUSH ROADSIDE VEGETATION

Production Unit: Each

Purpose

Woody perennial plants and seedling trees naturally encroach on the roadway. They need to be controlled for the same reasons as weeds and grass vegetation.

Charge to this Activity when removing brush.

Do not charge to this Activity when performing vegetation control activities specifically to restore hydraulic capacity of drainage facilities. Charge to the appropriate drainage Activity (C50050, C51050, C60050, etc.).

Special Requirements

If controlling noxious or invasive weeds use the Special Designations for noxious weeds. See the last page of these “C” Family Activity instructions, “Caltrans Special Designation Numbers: Weed and Insect Control”.

There are areas on the roadside that are sensitive and require special treatment. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting “VEGCON reports” under the “Asset” tab and choosing “VEGCON-Sensitive Area Report”. Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Each plant removed.

July 2006

C30031 – REMOVE TREE ROADSIDE VEGETATION

Production Unit: Each

Purpose

A tree is a woody perennial plant with a diameter of 4 inches or greater (when measured 4 feet from the ground) and has a total height greater than 20 feet.

Charge to this Activity when removing trees.

When performing vegetation control activities specifically to restore hydraulic capacity of drainage facilities, charge to the appropriate drainage Activity (C50050, C51050, C60050, etc.).

Special Requirements

Only qualified personnel are authorized to fell trees. Personnel who are not in a current Caltrans tree maintenance classification must be qualified by a Caltrans Tree Maintenance Supervisor before they are permitted to fell a tree.

There are areas on the roadside that are sensitive and require special treatment. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting “VEGCON reports” under the “Asset” tab and choosing “VEGCON-Sensitive Area Report”. Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Each tree removed.

July 2006

C30032 – STUMP GRINDING ROADSIDE VEGETATION

Production Unit: Each

Purpose

Stumps of removed trees are not to be left on the right of way. Remove the stump or cut it off 8 inches below the surface when it is within the limits of blading or mowing operations. Stump grinding is the recommended way to remove stumps.

Charge to this Activity when removing stumps with a power stump grinder.

Special Requirements

None

Production Unit Calculation

Each stump ground.

July 2006

C40010 – REPAIR/REPLACE FENCES

Production Unit: Feet

Purpose

Charge to this Activity when repairing or replacing right of way fence or any other Caltrans owned fence.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

Production Unit Calculation

Feet of fence repaired or replaced.

C40011 – REPAIR/REPLACE GATE FENCES

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing right of way gates or any other Caltrans owned gates.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

Production Unit Calculation

Each gate repaired or replaced.

July 2006

C40020 – DAY LABOR FENCES

Production Unit: Feet

Purpose

Day Labor is capital work (construction, improvements etc.) performed by Caltrans Maintenance employees. This work would normally be completed by Construction; however, other Divisions can request a Day Labor job.

Charge to this Activity when performing Day Labor work installing fence.

Special Requirements

A Day Labor Expenditure Authorization is required.

Production Unit Calculation

Feet of fence installed or removed.

July 2006

C50010 – REPAIR/REPLACE DITCHES AND CHANNELS

Production Unit: Linear feet

Purpose

Charge to this Activity when repairing or replacing right of way ditches and channels.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

If the ditch or channel needs to be increased in size or modified, consult with the Maintenance Engineer, Project Development, and/or Hydraulic Section before proceeding with the project.

Production Unit Calculation

Each ditch or channel repaired or replaced.

C50020 – DAY LABOR DITCHES AND CHANNELS

Production Unit: Linear feet

Purpose

Day Labor is capital work (construction, improvements etc.) performed by Caltrans Maintenance employees. This work would normally be completed by Construction; however, other Divisions can request a Day Labor job.

Charge to this Activity when performing Day Labor work installing ditches and channels.

Special Requirements

A Day Labor Expenditure Authorization is required.

Production Unit Calculation

Feet of ditch or channel installed or removed.

July 2006

C50050 – CLEAN DITCHES AND CHANNELS

Production Unit: Linear feet

Purpose

Cleaning of ditches and channels may be required to restore hydraulic capacity, allow for inspections to occur, and prevent erosion, obstructions, or blockages of flow from occurring. Charge to this Activity when cleaning ditches and channels.

Special Requirements

None

Production Unit Calculation

Feet of ditch or channel cleaned.

C51010 – REPAIR/REPLACE CURBS AND DIKES

Production Unit: Linear feet

Purpose

Charge to this Activity when repairing or replacing right of way curbs and dikes.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

If the curb or dike needs to be increased in size or modified, consult with the Maintenance Engineer, Project Development, and/or Hydraulic Section before proceeding with the project.

Production Unit Calculation

Linear feet of dike repaired or replaced.

July 2006

C51020 – DAY LABOR CURBS AND DIKES

Production Unit: Each occurrence

Purpose

Day Labor is capital work (construction, improvements etc.) performed by Caltrans Maintenance employees. This work would normally be completed by Construction; however, other Divisions can request a Day Labor job.

Charge to this Activity when performing Day Labor work installing curbs and dikes.

Special Requirements

A Day Labor Expenditure Authorization is required.

Production Unit Calculation

Each curb and dike installed or removed.

C51050 – CLEAN CURBS AND DIKES

Production Unit: Linear feet

Purpose

Cleaning of curbs and dikes may be required to restore hydraulic capacity, allow for inspections to occur, and prevent erosion, obstructions, or blockages of flow from occurring. Charge to this Activity when cleaning curbs and dikes.

Special Requirements

None

Production Unit Calculation

Feet of curbs and dikes cleaned.

July 2006

C51070 – SEAL CURBS AND DIKES

Production Unit: Linear feet

Purpose

Sealing of curbs and dikes may be required to prevent erosion and crack and weed growth from occurring. Charge to this Activity when sealing curbs and dikes.

Special Requirements

None

Production Unit Calculation

Feet of curbs and dikes sealed.

July 2006

C60003 – TEST/SAMPLE CULVERT OPENINGS

Production Unit: Sample

Purpose

Testing and sampling soils and water in and around culvert openings may be required to thoroughly investigate causes of deterioration or loss of structural integrity. Although performing the tests may require the assistance from Translab or a contractor, charge time spent acquiring samples and performing the tests to this Activity.

Do not use for:

- Testing or sampling culvert openings for **water quality requirements**. See Activity F80301 and Maintenance Manual Volume 1, Chapter “F”.

Special Requirements

If the reason for testing or sampling is due to suspected presence of hazardous materials, refer to Maintenance Manual Volume 1, Chapter “D5” for procedures that should be taken.

Production Unit Calculation

Each test or sample taken.

July 2006

C60004 – TAG/LOCATE CULVERT OPENINGS

Production Unit: Each

Purpose

Each district should have a complete inventory of culverts. Charge time spent locating and tagging culvert openings to this Activity.

Do not use for:

- Tagging and locating Horizontal drains (see Activity C70004).
- Tagging and locating Underdrains (see Activity C71004).
- Tagging and locating in support of the Culvert Inspection Program. (see Activity C61001).
- Routine drain cleaning (select the appropriate Activity CXX050).

Special Requirements

None

Production Unit Calculation

Each culvert opening tagged or located.

July 2006

C60010 – REPAIR/REPLACE CULVERT OPENINGS

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing right of way culvert openings.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

When replacing a culvert opening, refer to the appropriate section of *the Standard Specifications*. If the culvert opening needs to be increased in size or modified, consult with the Maintenance Engineer, Project Development, and/or Hydraulic Section before proceeding with the project.

Production Unit Calculation

Each culvert opening repaired or replaced.

C60020 – DAY LABOR CULVERT OPENINGS

Production Unit: Each

Purpose

Day Labor is capital work (construction, improvements etc.) performed by Caltrans Maintenance employees. This work would normally be completed by Construction; however, other Divisions can request a Day Labor job.

Charge to this Activity when performing Day Labor work installing culvert openings.

Special Requirements

A Day Labor Expenditure Authorization is required.

Production Unit Calculation

Each culvert opening installed or removed.

July 2006

C60050 – CLEAN CULVERT OPENINGS

Production Unit: Each

Purpose

Cleaning of culvert openings may be required to restore hydraulic capacity, allow for inspections to occur, and prevent erosion, obstructions, or blockages of flow from occurring. Charge to this Activity when cleaning culvert openings.

Special Requirements

When cleaning culvert openings for water quality requirements, please refer to Maintenance Manual Volume 1, Chapter “F”. Charge this type cleaning to F20050.

Production Unit Calculation

Each culvert opening cleaned.

July 2006

C61001 – DRAINAGE FACILITY INSPECTION

Production Unit: Each

Purpose

This Activity should be used for:

- Annual inspection of all drainage facilities each fall to ensure the facilities are clean and in good repair, and should also be inspected as soon after major storms as possible.
- Routine inspection of culverts for signs of erosion, obstructions, blockage of flow, or any other drainage condition that needs to be corrected.
- Culvert inspections in support of the Culvert Inspection Program. (See Special Requirements below regarding the Culvert Inspection Program).
- Tagging and locating culverts in support of the Culvert Inspection Program.

Do not use for:

- Complaint investigation (see Activity C20002).
- Tagging and locating drainage facilities not in support of the Culvert Inspection Program (See Activities C60004, C70004, C71004).

Special Requirements

Each district should have a Culvert Inspection Program that performs detailed inspections of all culverts, including a complete condition assessment of the interior and exterior of the culverts. Any inspections in support of the Culvert Inspection Program shall be charged to Expenditure Authorization 930320. A valid Subjob shall be obtained from the District Maintenance Engineer or Statewide Culvert Inspection Program Coordinator.

Do not use this EA and Subjob for routine inspections that are not a part of the Culvert Inspection Program. The District Maintenance Engineer should have details concerning charges to the Culvert Inspection Program.

Production Unit Calculation

Each inspected.

July 2006

C61010 – REPAIR/REPLACE CULVERTS

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing right of way culverts.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

When replacing a culvert refer to the appropriate section of the *Standard Specifications*. If the culvert needs to be increased in size or modified, consult with the Maintenance Engineer, Project Development, and/or Hydraulic Section before proceeding with project.

Production Unit Calculation

Each culvert repaired or replaced.

C61050 – CLEAN CULVERTS

Production Unit: Each

Purpose

Cleaning of culverts may be required to restore hydraulic capacity, allow for inspections to occur, and prevent erosion, obstructions, or blockages of flow from occurring. Charge to this Activity when cleaning culverts.

Special Requirements

When cleaning culverts for illegal discharge clean up, please refer to Maintenance Manual Volume 1, Chapter “F”. Charge this type cleaning to F60050.

Production Unit Calculation

Each culvert cleaned.

July 2006

C62010 – REPAIR/REPLACE OVERSIDE DRAINS

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing overside drains.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

When replacing an overside drain, refer to the appropriate section of the *Standard Specifications*. If the overside drain needs to be increased in size or modified, consult with the Maintenance Engineer, Project Development, and/or Hydraulic Section before proceeding with project.

Production Unit Calculation

Each overside drain repaired or replaced.

C62050 – CLEAN OVERSIDE DRAINS

Production Unit: Each

Purpose

Cleaning of overside drains may be required to restore hydraulic capacity, allow for inspections to occur, and prevent erosion, obstructions, or blockages of flow from occurring. Charge to this Activity when cleaning overside drains.

Special Requirements

When cleaning overside drains for water quality requirements, please refer to Maintenance Manual Volume 1, Chapter “F”. Charge this type cleaning to F20050.

Production Unit Calculation

Each overside drain cleaned.

July 2006

C63010 – REPAIR/REPLACE SLOTTED DRAINS

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing slotted drains.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

When replacing a slotted drain refer to the appropriate section of the *Standard Specifications*. If the slotted drain needs to be increased in size or modified, consult with the Maintenance Engineer, Project Development, and/or Hydraulic Section before proceeding with project.

Production Unit Calculation

Each slotted drain repaired or replaced.

C63050 – CLEAN SLOTTED DRAINS

Production Unit: Each

Purpose

Cleaning of slotted drains may be required to restore hydraulic capacity, allow for inspections to occur, and prevent erosion, obstructions, or blockages of flow from occurring. Charge to this Activity when cleaning slotted drains.

Special Requirements

When cleaning slotted drains for water quality requirements, please refer to Maintenance Manual, Volume 1, Chapter “F”. Charge this type of work to Activity F20050.

Production Unit Calculation

Each slotted drain cleaned.

July 2006

C64010 – REPAIR/REPLACE DRAINAGE INLETS

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing drainage inlets.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

When replacing a drainage inlet refer to the appropriate section of the *Standard Specifications*. If the DI needs to be increased in size or modified, consult with the Maintenance Engineer, Project Development, and/or Hydraulic Section before proceeding with project.

Production Unit Calculation

Each drainage inlet repaired or replaced.

C64050 – CLEAN DRAINAGE INLETS

Production Unit: Each

Purpose

Cleaning of drainage inlets may be required to restore hydraulic capacity, allow for inspections to occur, and prevent erosion, obstructions, or blockages of flow from occurring. Charge to this Activity when cleaning drainage inlets.

Special Requirements

When cleaning drainage inlets for water quality requirements, please refer to Maintenance Manual Volume 1, Chapter “F”. Charge this type cleaning to F20050.

Production Unit Calculation

Each drainage inlet cleaned.

July 2006

C70004 – TAG/LOCATE HORIZONTAL DRAINS

Production Unit: Each

Purpose

Each district should have a complete inventory of horizontal drains. Charge time spent locating and tagging horizontal drains to this Activity.

Do not use for:

- Routine inspections (see Activity C61001).
- Tagging and locating in support of the Culvert Inspection Program (see Activity C61001).

Special Requirements

None

Production Unit Calculation

Each horizontal drain tagged or located.

July 2006

C70010 – REPAIR/REPLACE HORIZONTAL DRAINS

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing horizontal drains.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

When replacing a horizontal drain refer to the appropriate section of the *Standard Specifications*. If the horizontal drain needs to be increased in size or modified, consult with the Maintenance Engineer, Project Development, and/or Hydraulic Section before proceeding with project.

Production Unit Calculation

Each culvert repaired or replaced.

C70020 – DAY LABOR HORIZONTAL DRAINS

Production Unit: Each

Purpose

Day Labor is capital work (construction, improvements etc.) performed by Caltrans Maintenance employees. This work would normally be completed by Construction; however, other Divisions can request a Day Labor job.

Charge to this Activity when performing Day Labor work installing horizontal drains.

Special Requirements

A Day Labor Expenditure Authorization is required.

Production Unit Calculation

Each horizontal drain installed or removed.

July 2006

C70050 – CLEAN HORIZONTAL DRAINS

Production Unit: Each

Purpose

Cleaning of horizontal drains may be required to restore hydraulic capacity, allow for inspections to occur, and prevent erosion, obstructions, or blockages of flow from occurring. Charge to this Activity when cleaning horizontal drains.

Special Requirements

When cleaning horizontal drains for water quality requirements, please refer to Maintenance Manual Volume 1, Chapter “F”. Charge this type cleaning to F20050.

Production Unit Calculation

Each horizontal drain cleaned.

C71004 – TAG/LOCATE UNDER DRAINS

Production Unit: Each

Purpose

Each district should have a complete inventory of under drains. Charge to this Activity time spent locating and tagging under drains but not time inspecting them.

Do not use for:

- Routine drainage inspections (see Activity C61001).
- Tagging and locating in support of the Culvert Inspection Program (see Activity C61001).

Special Requirements

None

Production Unit Calculation

Each under drain tagged or located.

July 2006

C71010 – REPAIR/REPLACE UNDER DRAINS

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing under drains.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

When replacing an under drain refer to the appropriate section of the *Standard Specifications*. If the under drain needs to be increased in size or modified, consult with the Maintenance Engineer, Project Development, and/or Hydraulic Section before proceeding with project.

Production Unit Calculation

Each under drain repaired or replaced

C71020 – DAY LABOR UNDER DRAINS

Production Unit: Each

Purpose

Day Labor is capital work (construction, improvements etc.) performed by Caltrans Maintenance employees. This work would normally be completed by Construction; however, other Divisions can request a Day Labor job.

Charge to this Activity when performing Day Labor work installing under drains.

Special Requirements

A Day Labor Expenditure Authorization is required.

Production Unit Calculation

Each under drain installed.

July 2006

C71050 – CLEAN UNDER DRAINS

Production Unit: Each

Purpose

Cleaning of under drains may be required to restore hydraulic capacity, allow for inspections to occur, and prevent erosion, obstructions, or blockages of flow from occurring. Charge to this Activity when cleaning under drains.

Special Requirements

When cleaning under drains for water quality requirements, please refer to Maintenance Manual, Volume 1 Chapter “F”. Charge this type cleaning to F20050.

Production Unit Calculation

Each under drain cleaned.

C90010 – REPAIR/REPLACE WALLS

Production Unit: Square feet

Purpose

Charge to this Activity when repairing or replacing right of way walls.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

Certain large or complexly designed walls are assigned Bridge Numbers and are generally inspected by qualified Bridge Maintenance Engineers. When repairing or replacing these walls, charge to the appropriate “H” Family Activity. For assistance in determining whether or not a specific wall has a Bridge Number assigned to it, contact the Area Bridge Maintenance Engineer assigned to each district. Contact the Maintenance Engineer or Engineering Services for assistance prior to performing repairs or replacing these types of walls.

Production Unit Calculation

Square feet of wall repaired or replaced.

July 2006

C90011 – REPAIR/REPLACE ACCESS OPENING WALLS

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing right of way access openings for walls.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

Certain large or complexly designed walls are assigned Bridge Numbers and are generally inspected by qualified Bridge Maintenance Engineers. When repairing or replacing access openings for these walls, charge to the appropriate “H” Family Activity. For assistance in determining whether or not a specific wall has a Bridge Number assigned to it, contact the Area Bridge Maintenance Engineer assigned to each district. Contact the Maintenance Engineer or Engineering Services for assistance prior to performing repairs or replacing access openings for these types of walls.

Production Unit Calculation

Each access opening repaired or replaced.

C91010 – REPAIR/REPLACE BIKE PATH

Production Unit: Square

Purpose

Charge to this Activity when repairing or replacing right of way bike paths.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

Production Unit Calculation

Square feet of bike path repaired or replaced.

July 2006

C91011 – MARKINGS REPAIR/REPLACE BIKE PATH

Production Unit: Square feet

Purpose

Charge to this Activity when repairing or replacing right of way bike path markings.

Special Requirements

None

Production Unit Calculation

Square feet of bike path repaired or replaced.

C91020 – SWEEPING BIKE PATH

Production Unit: Linear feet

Purpose

Bike paths should be kept free of litter and debris that may be offensive, limit usage, or pose as a hazard to bikers. Charge to this Activity when sweeping bike paths.

Special Requirements

None

Production Unit Calculation

Linear feet of bike paths swept.

July 2006

C91030 – LITTER/DEBRIS REMOVAL BIKE PATH

Production Unit: Cubic yard

Purpose

Bike paths should be kept free of litter and debris that may be offensive, limit usage, or pose as a hazard to bikers. Charge to this Activity when removing litter and debris from bike paths.

Special Requirements

None

Production Unit Calculation

Cubic yards of litter and debris removed.

C92010 – REPAIR/REPLACE SIDEWALK

Production Unit: Square feet

Purpose

Charge to this Activity when repairing or replacing right of way sidewalks.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

Production Unit Calculation

Square feet of sidewalk repaired or replaced.

July 2006

C92050 – CLEAN SIDEWALK

Production Unit: Linear feet

Purpose

Sidewalks should be kept free of debris that may be tripping hazards. Cleaning of sidewalks may be required to allow for inspections to occur and remove obstructions or blockages that may pose as tripping hazards. Charge to this Activity when cleaning sidewalks.

Special Requirements

None.

Production Unit Calculation

Linear feet of sidewalk cleaned.

C93010 – REPAIR/REPLACE CATTLEGUARD

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing right of way cattleguards.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

Production Unit Calculation

Each cattleguard repaired or replaced.

July 2006

C93020 – DAY LABOR CATTLEGUARD

Production Unit: Each

Purpose

Day Labor is capital work (construction, improvements etc.) performed by Caltrans Maintenance employees. This work would normally be completed by Construction; however, other Divisions can request a Day Labor job.

Charge to this Activity when performing Day Labor work installing cattleguards.

Special Requirements

A Day Labor Expenditure Authorization is required.

Production Unit Calculation

Each cattleguard installed or removed.

C93021 – SEASONAL WING INSTALL CATTLEGUARD

Production Unit: Each

Purpose

Seasonal wings may be installed next to cattleguards to keep cattle from crossing between fences and cattleguards. Charge to this Activity when installing seasonal wings next to cattleguards.

Special Requirements

None

Production Unit Calculation

Each seasonal wing installed.

July 2006

C93050 – CLEAN CATTLEGUARD

Production Unit: Each

Purpose

Cleaning of cattleguards may be required to allow for inspections to occur and remove obstructions or blockages that may hinder performance. Charge to this Activity when cleaning cattleguards.

Special Requirements

None

Production Unit Calculation

Each cattleguard cleaned.

C93060 – PAINT CATTLEGUARD

Production Unit: Each

Purpose

Painting of cattleguards may be required to prolong the service life or remain visible. Charge to this Activity when painting cattleguards.

Special Requirements

None

Production Unit Calculation

Each cattleguard painted.

July 2006

C94003 – TEST/SAMPLE DRYWELL

Production Unit: Sample

Purpose

Testing and sampling soils and water in and around drywells may be required to thoroughly investigate causes of deterioration or loss of structural integrity. Although performing the tests may require the assistance from Translab or a contractor, charge time spent acquiring samples and performing the tests to this Activity.

Do not use for:

- Testing or sampling culvert openings for **water quality requirements**. See Activity F80301 and Maintenance Manual Volume 1, Chapter “F”.

Special Requirements

If the reason for testing or sampling is due to suspected presence of hazardous materials, refer to Maintenance Manual Volume 1, Chapter “D5” for procedures that should be taken.

Production Unit Calculation

Each test or sample taken.

July 2006

C94004 – TAG/LOCATE DRYWELL

Production Unit: Each

Purpose

Each district should have a complete inventory of drywells. Charge time spent locating and tagging drywells to this Activity.

Do not charge routine drainage inspections to this Activity (see Activity C61001).

Special Requirements

None

Production Unit Calculation

Each drywell tagged or located.

C94010 – REPAIR/REPLACE DRYWELL

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing right of way drywells.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

Production Unit Calculation

Each drywell repaired or replaced.

July 2006

C94020 – DAY LABOR DRYWELL

Production Unit: Each

Purpose

Day Labor is capital work (construction, improvements etc.) performed by Caltrans Maintenance employees. This work would normally be completed by Construction; however, other Divisions can request a Day Labor job.

Charge to this Activity when performing Day Labor work installing drywells.

Special Requirements

A Day Labor Expenditure Authorization is required.

Production Unit Calculation

Each drywell installed or removed.

C94050 – CLEAN DRYWELL

Production Unit: Each

Purpose

Cleaning of drywells may be required to allow for inspections to occur and remove obstructions or blockages. Charge to this Activity when cleaning drywells.

Special Requirements

None

Production Unit Calculation

Each drywell cleaned.

July 2006

C95003 – TEST/SAMPLE MANHOLES

Production Unit: Sample

Purpose

Testing and sampling soils and water in and around manholes may be required to thoroughly investigate causes of deterioration or loss of structural integrity. Although performing the tests may require the assistance from Translab or a contractor, charge time spent acquiring samples and performing the tests to this Activity.

- Testing or sampling culvert openings for **water quality requirements**. See Activity F80301 and Maintenance Manual Volume 1, Chapter “F”.

Special Requirements

If the reason for testing or sampling is due to suspected presence of hazardous materials, refer to Maintenance Manual Volume 1, Chapter “D5” for procedures that should be taken.

Production Unit Calculation

Each test or sample taken.

C95010 – REPAIR/REPLACE MANHOLES

Production Unit: Each

Purpose

Charge to this Activity when repairing or replacing manholes.

Special Requirements

Refer to “IMMS Damage Reporting Instructions” to capture recoverable costs.

Production Unit Calculation

Each manhole repaired or replaced.

July 2006

C95020 – DAY LABOR MANHOLES

Production Unit: Each

Purpose

Day Labor is capital work (construction, improvements etc.) performed by Caltrans Maintenance employees. This work would normally be completed by Construction; however, other Divisions can request a Day Labor job.

Charge to this Activity when performing Day Labor work installing manholes.

Special Requirements

A Day Labor Expenditure Authorization is required.

Production Unit Calculation

Each manhole installed or removed.

C95050 – CLEAN MANHOLES

Production Unit: Each

Purpose

Cleaning of manholes may be required to restore hydraulic capacity, allow for inspections to occur, and prevent erosion, obstructions, or blockages of flow from occurring. Charge to this Activity when cleaning manholes.

Special Requirements

When cleaning manholes for water quality requirements, please refer to Maintenance Manual Volume 1, Chapter “F”. Charge this type cleaning to F20050.

Production Unit Calculation

Each manhole cleaned.

July 2006

C96010 – REPAIR/REPLACE RADIATOR WATER SITE**Production Unit:** Each**Purpose**

Repair and/or replacement work performed at Radiator Water Sites on State highway.

Special Requirements

None

Production Unit Calculation

Each radiator site repaired or replaced.

C96050 – CLEAN AND REFILL AT RADIATOR WATER SITE**Production Unit:** Each**Purpose**

Cleaning and refill work performed at Radiator Water Sites on State highway.

Special Requirements

None

Production Unit Calculation

Each radiator site cleaned or refilled.

July 2006

Caltrans VegCon Special Designation Numbers: Weed and Insect Control/Eradication Efforts

Special Designation numbers should only be used to track noxious weed or insect control efforts when performing work in response to a request (from individuals or groups outside of Caltrans) and for controlling weeds and insects that Caltrans would normally not control. It is a good idea to have a letter on file or some type of documentation from the County Agriculture Commissioner endorsing the specific noxious weed or insect control/eradication project.

Weed List

Botanical Name – Common Name	Special Designation
Arundo donax – Giant Reed	Mweed01
Rubus procerus – Himalaya Blackberry (<i>Also known as R. discolor</i>)	Mweed02
Cytisus scoparius, Spartium junceum and Cytisus canariensis - Scotch Broom, Spanish Broom and Canary Island Broom <i>formerly known as (synonymous with) the Genista family</i>	Mweed03
Centaurea diffusa – Diffuse Knapweed	Mweed04
Conyza canadensis – Horseweed (<i>Also known as Marestalk</i>)	Mweed05
Ulex europaeus – Gorse	Mweed06
Halogeton glomeratus - Halogeton	Mweed07
Sorghum halepense – Johnsongrass	Mweed08
Hypericum perforatum - Klamath Weed	Mweed09
Salvia aethiopis – Mediterranean Sage	Mweed10
Cortaderia selloana and Cortaderia jubata – Pampas Grass and Jubata Grass	Mweed11
Lepidium latifolium - Perennial Pepperweed - (<i>Also known as Tall Whitetop</i>)	Mweed12
Conium maculatum – Poison Hemlock	Mweed13
Tribulus terrestris – Puncturevine	Mweed14
Salsola iberica – Russian Thistle	Mweed15
Tamarix ramosissima – Saltcedar (<i>Also known as Tamarisk</i>)	Mweed16
Lygodesmia juncea – Skeleton Weed	Mweed17
Centaurea maculosa - Spotted Knapweed	Mweed18
Ageratina adenophora - Sticky Eupatorium <i>(Also known botanically as Eupatorium adenophorum)</i>	Mweed19
Melilotus officinalis – Sweetclover (includes Yellow, White and Indian Sweetclovers)	Mweed20
Helianthus annuus – Common Sunflower	Mweed21
Centaurea solstitialis - Yellow Starthistle	Mweed22
Foeniculum vulgare – Common Fennel (<i>Also known as Anise</i>)	Mweed23
Lythrum salicaria – Purple Loosestrife	Mweed24
Delairea odorata – Cape Ivy <i>formerly known as (synonymous with) Senecio mikanioides, German Ivy – previously recorded as Mweed05</i>	Mweed25
Ailanthus altissima – Tree-of-Heaven	Mweed26
Ricinus communis – Castor Bean	Mweed27
Eriogonum fasciculatum - California Buckwheat	Mweed28
Cynara cardunculus – Artichoke Thistle	Mweed29
Nicotiana glauca – Tobacco Plant	Mweed30
Cardaria draba – Hoary Cress (<i>Also known as Whitetop</i>)	Mweed31
Achnatherum brachychaetum - Punagrass	Mweed32
Schinus terebinthifolius – Brazilian Pepper Tree	Mweed33
Asphodelus fistulosus – Onion weed (Also known as Holoow-Stern Asphodel)	Mweed34

July 2006

INSECT LIST	
Glassy-Winged Sharpshooter	Mglassy

July 2006

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ROAD PATROL INSPECTION AND INVESTIGATION ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
D20000	ROAD PATROL/PICKUP	VEMI	Vehicle Miles	RW
D20001	AREA INSPECTION ROADWAY	VEMI	Vehicle Miles	RW
D20002	COMPLAINT INVESTIGATION	EAOC	Each Occurrence	RW

SWEEPING ROADWAY ACTIVITIES

Activity D30000 has been expired. All highway and shoulder sweeping, with the exception of rest areas, vista points, and Park and Ride lots is now charged to Activity F20051. See F20051 Activity Instructions for general guidelines, and for special reporting requirements when performing “mandated” sweeping.

LITTER AND DEBRIS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
D40100	LITTER CONTROL ROADWAY/LNDSCP	CUYD	Cubic Yard	RW
D40101	ADOPT-A-HWY LITTER CONTROL	CUYD	Cubic Yard	FAC
D40102	ADOPT-A-HWY SAFETY ORIENTATION	EAOC	Each Occurrence	RW
D40103	ADOPT-A-HWY ADMINISTRATION	EAOC	Each Occurrence	FAC,RW
D40104	ILLEGAL ENCAMPMENT DEBRIS	EAOC	Each Occurrence	RW

SPILLS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
D50000	SPILLS RWY,LANE,SHLDR & APPURT	EAOC	Each Occurrence	APP,RW, FAC

GRAFFITI ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
D60000	GRAFFITI REMOVAL ALL ASSETS	SQFT	Square Feet	APP,BR,FAC, RW

HAZMAT DISPOSAL AND STORAGE

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
D70000	HAZMAT DISPOSAL AND STORAGE	NONE	None	FAC

ILLEGAL SIGN REMOVAL ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
D90000	ILLEGAL SIGN REMOVAL	EA	Each	RW

September 2008

**D20000 – ROAD PATROL/PICKUP
ROAD PATROL INSPECTION AND INVESTIGATION****Production Unit:** Vehicle miles**Purpose**

Remove debris and/or animal carcasses from on or near the traveled way. May be routine road patrol, or specific requests to remove debris and/or carcasses from on or near the traveled way or unpaved shoulders.

Special Requirements

None

Production Unit Calculation

Production should only be recorded one time per vehicle.

**D20001 – AREA INSPECTION ROADWAY
ROAD PATROL INSPECTION AND INVESTIGATION****Production Unit:** Vehicle miles**Purpose**

Routine inspection for litter and debris removal on the right of way.

Special Requirements

None

Production Unit Calculation

Production should only be recorded one time per vehicle.

September 2008

D20002 – COMPLAINT INVESTIGATION ROADWAY ROAD PATROL INSPECTION AND INVESTIGATION

Production Unit: Each occurrence

Purpose

Investigate complaints of litter and debris on the right of way.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed

Special Requirements

None

Production Unit Calculation

Each occurrence

D30000 – SWEEPING ROADWAY

Activity D30000 has been expired. All highway and shoulder sweeping, with the exception of rest areas, vista points, and Park and Ride lots is now charged to Activity F20051. See F20051 Activity Instructions for general guidelines, and for special reporting requirements when performing “mandated” sweeping.

September 2008

D40100 – LITTER CONTROL ROADWAY/LANDSCAPE LITTER AND DEBRIS

Production Unit: Cubic yard

Purpose

Picking up and disposing of litter and debris within the right of way.

Do not use this Activity for:

- Illegal encampment debris removal (see D40104).
- Collecting Adopt-A-Hwy bags and other debris (see D40101).

Special Requirements

Use appropriate Contractor codes when utilizing Special Programs Personnel (SPP). (See Chapter 2 of this manual).

Employees may locate specific instructions titled *Recording Litter Control – Reporting Shoulder Miles Cleaned* on the Intranet at:

http://onramp.dot.ca.gov/hq/maint/imms_procedures.htm

Production Unit Calculation

Cubic yard. 7 full 30-gallon orange bags or 4 full clear 55-gallon bags equal 1 cubic yard.

September 2008

D40101 – ADOPT-A-HWY LITTER CONTROL LITTER AND DEBRIS

Production Unit: Cubic yards

Purpose

Collection and disposal of trash bags and other debris that has been picked up by Adopt-A-Hwy Program participants.

Special Requirements

Crews that have Adopt-A-Highway Litter Control Encroachment Permits issued in their areas must create a *Monthly Adopt-A-Hwy Litter Control Work Order* on the first of each month.

Employees may locate specific instructions titled *Recording Adopt-A-Highway Bag Counts and Shoulder Miles Cleaned* on the Intranet at:

<http://onramp.dot.ca.gov/hq/maint/imms/RecordingAAHBagCountsandSHOMICleaned.pdf>

Production Unit Calculation

Cubic yard. 7 full 30-gallon white bags equal 1 cubic yard.

September 2008

D40102 – ADOPT-A-HWY SAFETY ORIENTATION LITTER AND DEBRIS

Production Unit: Each occurrence

Purpose

Account for time spent reviewing the *Adopt-A-Highway Safety Orientation Checklist* with the volunteer Group Leader or their paid contractor's representative. Includes providing a drive-by or walk-through review of the adoption site (mandatory, even for contracted adoptions), and issuance of safety gear and supplies.

Special Requirements

The Safety Orientation must be scheduled within 2 weeks of the permit issue date in order to begin work within 30 days of the permit issue date.

Production Unit Calculation

Each occurrence

D40103 – ADOPT-A-HWY ADMINISTRATION LITTER AND DEBRIS

Production Unit: Each occurrence

Purpose

Document the time spent performing Adopt-A-Highway Site Reviews, Spot Performance Field Reviews, communication and/or documentation of performance to the group, contractor, or the District Adopt-A-Highway Coordinator.

Special Requirements

None

Production Unit Calculation

Each occurrence

September 2008

D40104 – ILLEGAL ENCAMPMENT DEBRIS REMOVAL ROADWAY LITTER AND DEBRIS

Production Unit: Each occurrence

Purpose

Removing debris from illegal encampments.

Special Requirements

Time spent overseeing cleanup and disposal of hazardous material should be charged to D50000.

Production Unit Calculation

Each spill is considered an occurrence.

D50000 – SPILLS RWY, LANE, SHLDR & APPURT

Production Unit: Each occurrence

Purpose

Handling of both hazardous and non-hazardous spills within the right of way.

Special Requirements

Follow instructions and complete required documentation per Maintenance Manual Volume I, Chapter D5, Maintenance Manual Volume 2, Chapters 2 and 6, and IMMS HAZMAT Reporting Instructions as required by your district.

Use of a Problem Code is required when there is a spill of a Hazardous Material.

Problem Codes

- ACDNT – Use when there is a known responsible party.
- ACUNK – Use when there is an unknown responsible party.
- CALTN – Use when Caltrans is the responsible party

Production Unit Calculation

Each spill is considered an occurrence.

September 2008

D60000 – GRAFFITI REMOVAL ALL ASSETS**Production Unit:** Square feet**Purpose**

Control of graffiti on and off of the traveled way. Includes cleaning or painting of signs, soundwalls, equipment cabinets, etc.

Special Requirements

Graffiti is considered damage to State property. If the responsible party is known, “IMMS Damage Reporting Instructions” should be followed.

If responsible party is unknown, the Problem Code ACUNK should be used.

Production Unit Calculation

Each square foot of graffiti removed.

September 2008

D70000 – HAZ MATERIAL STORAGE, DISPOSAL, TRACKING MAINTENANCE FACILITIES

Production Unit: None

Purpose

Use this Activity for:

- Inspection of regulated materials and hazardous waste stored at Maintenance facilities to keep the station functioning, prevent spillage, and comply with State Agencies and local Certified Unified Program Agencies (CUPA) requirements for managing hazardous materials. Completion of associated environmental documentation
- Scheduling and preparation for removal of Caltrans generated waste stored at a Maintenance facility.
- Preparing documents for hazardous material disclosure reports (Business Plans), conducting inventory of hazardous material storage sites, preparing spill contingency plans and annual hazardous waste manifest reports.
- Performing and documenting inspections of under and above ground storage tanks.

Do not use this Activity for highway spills.(see Activity D50000).

Special Requirements

Follow all Caltrans and regulatory agency policies regarding hazardous material and waste storage, disposal, and tracking. Contact your District HAZMAT Manager if you have questions regarding these policies.

Production Unit Calculation:

None

September 2008

D90000 – ILLEGAL SIGN REMOVAL**Production Unit:** Each**Purpose**

Removal of illegal signs such as real estate, fruit stands, politics, merchandise sales, or business names.

Do not charge to this Activity for outdoor advertising with a removal notice and an Expenditure Authorization (see Y91000).

Special Requirements

None

Production Unit Calculation

Each

July 2005

LANDSCAPING ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
E10001	INSPECTION	VEMI	Vehicle Miles	RW
E10002	COMPLAINT INVESTIG	EAOC	Each Occurrence	RW
E10009	USA	EAOC	Each Occurrence	RW
E10010	MECHANICAL CONTROL	ACRE	Acre	RW
E10012	CHEMICAL CONTROL	ACRE	Acre	RW
E10013	BIOLOGICAL CONTROL	ACRE	Acre	RW
E10014	MANUAL CONTROL	ACRE	Acre	RW
E10015	RODENT CONTROL	ACRE	Acre	RW
E10016	THERMAL CONTROL	ACRE	Acre	RW
E10017	CULTURAL CONTROL	ACRE	Acre	RW
E10018	STRUCTURAL CONTROL	ACRE	Acre	RW
E20020	REPLANT GROUNDCOVER	ACRE	Acre	RW
E20021	REPLANT SHRUBS & TREES	EA	Each	RW
E20022	LANDSCAPE - DAY LABOR	ACRE	Acre	RW
E20030	REMOVE SHRUB	EA	Each	RW
E20031	REMOVE TREE	EA	Each	RW
E20032	STUMP GRINDING	EA	Each	RW
E20040	PRUNING (T,S,V)	EA	Each	RW
E20041	PRUNING - LINEAL MECH.	LIMI	Linear Miles	RW
E20042	PRUNING GROUNDCOVER	LIFT	Linear Feet	RW
E20050	FERTILIZING	ACRE	Acre	RW
E20060	REPAIR BASIN (T,S,V)	EA	Each	RW
E30010	IRRIGATION SYSTEM REPAIR	EA	Each	RW
E30011	IRRIG ELECTRICAL REPAIR	EA	Each	RW
E30013	BACKFLOW PREVENTER	EA	Each	RW
E30050	IRRIGATING	ACRE	Acre	RW
E30051	TRUCK WATERING	LIMI	Linear Miles	RW

July 2005

E10001 – INSPECTION LANDSCAPING

Production Unit: Vehicle miles

Purpose

Perform routine inspections of Caltrans landscaping. Inspecting for undiscovered work, completed work, or for any other reason other than complaints should be charged to this Activity.

Charge complaint investigation to E10002.

Special Requirements

None

Production Unit Calculation

Vehicle miles driven inspecting. Do not charge travel time to and from inspected area as production. Charge travel time to support on the Additional tab.

July 2005

E10002 – COMPLAINT INVESTIGATION LANDSCAPING

Production Unit: Each occurrence

Purpose

Complaints concerning the condition of roadside landscaping should be responded to quickly. Responding to the complaints requires investigation to determine how best to respond to the people making the complaint.

Charge time spent investigating the complaint to this Activity. This includes, but is not limited to, calling or meeting with the complaining party, travel time, time spent reviewing the complaint site, and writing/e-mailing the response.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

None

Production Unit Calculation

Each complaint investigated.

E10009 – USA LANDSCAPING

Production Unit: Each occurrence

Purpose

Underground Service Alert (USA) must be notified in advance when digging, boring, trenching, etc. deeper than 6 inches. Charge to this Activity time spent obtaining USA clearance.

Special Requirements

None

Production Unit Calculation : Each occurrence

July 2005

E10010 – MECHANICAL CONTROL (G,W) LANDSCAPING

Production Unit: Acre

Purpose

Caltrans controls grasses and weeds in landscape areas to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and for aesthetics.

It is Caltrans' policy to control grass and weeds in a landscape area using an Integrated Vegetation Management (IVM) treatment. Mechanical control is one of the IVM methods.

Charge to this Activity when utilizing a mechanical method for grass and weed control with a tractor mounted mower. Also charge when mowing turf with any type of mower except a walk behind. Charge mowing with a walk behind mower, string trimmer, or other hand held power equipment to E10014.

Special Requirements

If mowing noxious or invasive weeds use the Special Designations for noxious weeds. See the last page of these "E" Family Activities instructions: "Caltrans Special Designation Numbers Plant and Insect Control".

There are areas in the landscape areas that should not be mowed or have other mechanical method requirements. Most of these areas are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Acres mowed. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2005

E10012 – CHEMICAL CONTROL LANDSCAPING

Production Unit: Acre

Purpose

Caltrans controls vegetation in landscape areas to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and for aesthetics.

It is Caltrans' policy to control vegetation in landscape areas using an Integrated Vegetation Management (IVM) treatment. Chemical control is one of these IVM methods.

Charge to this Activity when spraying pesticides (herbicides, insecticides, and plant growth regulators) for weed, insect control, edging groundcovers, and controlling plant growth. Also charge any other form of chemical weed or insect control.

Do not charge chemical rodent controls to this Activity (see E10015).

Special Requirements

A Pest Control Advisor's recommendation from the District Landscape Specialist must be obtained before applying pesticides on a Caltrans right of way.

Applicators must wear proper personal protective equipment and have completed Pesticide Safety Training prior to applying herbicides.

If controlling noxious or invasive weeds use the Special Designations for noxious weeds. See the last page of these "E" Family Activities instructions "Caltrans Special Designation Numbers: Plant and Insect Control".

There are areas in the landscape that are sensitive and require special treatment. Most of these regions are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

**WORK ORDERS WHICH INCLUDE CHEMICAL USAGE MUST BE COMPLETED /
CLOSED DAILY.**

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2005

E10013 – BIOLOGICAL CONTROL LANDSCAPING

Production Unit: Acre

Purpose

Biological Control is any activity of species (natural enemy) that reduces the adverse effects of another species (pests and weeds).

Caltrans controls vegetation in landscape areas to ensure visibility for safety, provide fire-risk management, and protect pavement surfaces, control noxious weeds, clear drainage facilities, and for aesthetics.

It is Caltrans' policy to control vegetation in landscape areas using an Integrated Vegetation Management (IVM) treatment. Biological control is one of the IVM methods.

Charge to this Activity when spreading beneficial insects for vegetation or insect control, spraying *Bacillus thuringiensis* (B.T.) for caterpillar control, herding goats for vegetation control, or any other form of biological vegetation or insect control in landscape areas.

Special Requirements

If controlling noxious or invasive weeds, use the Special Designations for noxious weeds. See the last page of these "E" Family Activities instructions "Caltrans Special Designation Numbers: Plant and Insect Control".

There are areas in the landscape that are sensitive and require special treatment. Most of these regions are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

**WORK ORDERS WHICH INCLUDE CHEMICAL USAGE MUST BE COMPLETED /
CLOSED DAILY.**

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2005

E10014 – MANUAL CONTROL LANDSCAPING

Production Unit: Acre

Purpose

Caltrans controls vegetation in landscape areas to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and for aesthetics.

It is Caltrans' policy to control vegetation in landscape areas using an Integrated Vegetation Management (IVM) treatment. Manual control is one of the IVM methods.

Charge to this Activity when hand pulling, hoeing, or whipping weeds or hand trimming, pruning or shaping landscape shrubs. Using handheld power tools such as string trimmers, walk behind mowers, and chain saws to control roadside vegetation is also charged to this Activity.

Special Requirements

If controlling noxious or invasive weeds, use the Special Designations for noxious weeds. See the last page of these "E" Family Activities instructions "Caltrans Special Designation Numbers: Plant and Insect Control".

There are areas in the landscape that are sensitive and require special treatment. Most of these regions are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2005

E10015 – RODENT CONTROL LANDSCAPING

Production Unit: Acre

Purpose

Corrective actions should be taken when rodent infestations are detrimental to the health of landscape plantings, damaging irrigation systems, or creating a significant nuisance to the traveling public or adjacent landowners.

Charge to this Activity when applying rodent baits, setting traps, or performing any other method of rodent control.

Special Requirements

A Pest Control Advisor's recommendation from the District Landscape Specialist is required before applying pesticide (most rodents bait are chemical pesticides) on a Caltrans right of way. Consult with the District Landscape Specialist before applying bait.

Applicators must wear proper personal protective equipment and have completed Pesticide Safety Training prior to applying pesticides.

There are areas in the landscape that are sensitive and require special treatment. Most of these regions are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

WORK ORDERS WHICH INCLUDE CHEMICAL USAGE MUST BE COMPLETED / CLOSED DAILY.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2005

E10016 – THERMAL CONTROL LANDSCAPING

Production Unit: Acre

Purpose

Caltrans controls vegetation in landscape areas to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and for aesthetics.

It is Caltrans' policy to control vegetation in landscaped areas using an Integrated Vegetation Management (IVM) treatment. Thermal control is one of the IVM methods.

Thermal methods include flaming, steam, solarization, and controlled burning. Caltrans predominantly uses controlled burning.

Charge this Activity when utilizing a thermal method for control of weeds or brush.

Special Requirements

If controlling noxious or invasive weeds, use the Special Designations for noxious weeds. See the last page of these "E" Family Activities instructions "Caltrans Special Designation Numbers: Plant and Insect Control".

There are areas in the landscape that are sensitive and require special treatment. Most of these regions are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2005

E10017 – CULTURAL CONTROL LANDSCAPING

Production Unit: Acre

Purpose

Caltrans controls vegetation in landscaped areas to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and for aesthetics.

It is Caltrans' policy to control vegetation in landscaped areas using an Integrated Vegetation Management (IVM) treatment. Cultural control is one of the IVM methods.

Cultural methods include applying mulch, proper plant selection, and irrigation and fertilization techniques.

Charge this Activity when utilizing a cultural method for control of weeds or brush.

Special Requirements

If controlling noxious or invasive weeds, use the Special Designations for noxious weeds. See the last page of these "E" Family Activities instructions "Caltrans Special Designation Numbers: Plant and Insect Control".

There are areas in the landscape that are sensitive and require special treatment. Most of these regions are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2005

E10018 – STRUCTURAL CONTROL LANDSCAPING

Production Unit: Acre

Purpose

Caltrans controls vegetation in landscaped areas to ensure visibility for safety, provide fire-risk management, protect pavement surfaces, control noxious weeds, clear drainage facilities, and for aesthetics.

It is Caltrans' policy to control vegetation in landscaped areas using an Integrated Vegetation Management (IVM) treatment. Structural control is one of the IVM methods.

Charge to this Activity when utilizing a structural method of control, including slope paving, riprap or rock cobble placement, and weed control mats around guard rail.

Special Requirements

If controlling noxious or invasive weeds, use the Special Designations for noxious weeds. See the last page of these "E" Family Activities instructions "Caltrans Special Designation Numbers: Plant and Insect Control".

There are areas in the landscape that are sensitive and require special treatment. Most of these regions are identified as sensitive areas on the District Vegetation Control Plan (VEGCON). The sensitive areas can be reviewed in IMMS by selecting "VEGCON reports" under the "Asset" tab and choosing "VEGCON-Sensitive Area Report". Contact your District Landscape Specialist if you need more information concerning these areas.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2005

E20020 – REPLANT GROUNDCOVER LANDSCAPING

Production Unit: Acre

Purpose

Groundcovers are plantings that are designed to completely cover the ground they are planted on. Examples are iceplant and ivy plantings. Caltrans also plants low growing, spreading ornamentals as groundcover.

Charge to this Activity when replacing plants that are planted as groundcovers.

Special Requirements

None

Production Unit Calculation

Acres replanted. One acre = 43,560 sq. ft.

E20021 – REPLANT SHRUBS & TREES LANDSCAPING

Production Unit: Each

Purpose

A shrub is a woody perennial plant, usually with many leaders and less than 20 feet in height.

A tree is a woody perennial plant with a diameter of 4 inches or greater (when measured 4 feet from the ground), and has a total height greater than 20 feet.

Charge to this Activity when replanting shrubs or trees. Included are vines that are not planted as groundcover, such as vines planted to cover walls.

Special Requirements

None

Production Unit Calculation

Each shrub or tree replaced.

July 2005

E20022 – LANDSCAPE - DAY LABOR LANDSCAPING

Production Unit: Acre

Purpose

Day Labor is capital work (construction, improvements etc.) performed by Caltrans Maintenance employees. This work would normally be completed by Construction; however, other Divisions can request a Day Labor job.

Charge to this Activity when performing Day Labor work for landscape areas.

Special Requirements

A Day Labor Expenditure Authorization is required. A Special Designation may be required.

Total costs are not to exceed \$25,000.

Production Unit Calculation

Acres planted. One acre = 43,560 sq. ft.

July 2005

E20030 – REMOVE SHRUB LANDSCAPING

Production Unit: Each

Purpose

A shrub is a woody perennial plant, usually with many leaders and less than 20 feet in height.

Charge to this Activity when removing shrubs. This would include chipping or removing the brush after removal.

Do not use this Activity for:

- Stump grinding (see E20032).
- Plant replacement (see E20021).

Special Requirements

None

Production Unit Calculation

Each shrub removed.

July 2005

E20031 – REMOVE TREE LANDSCAPING

Production Unit: Each

Purpose

A tree is a woody perennial plant with a diameter of 4 inches or greater (when measured 4 feet from the ground), and has a total height greater than 20 feet.

Charge to this Activity when removing trees. This would include chipping and/or removing the brush and trunk after removal.

Do not use this Activity for:

- Stump grinding (see E20032).
- Plant replacement (see E20021).

Special Requirements

None

Production Unit Calculation

Each tree removed.

E20032 – STUMP GRINDING LANDSCAPING

Production Unit: Each

Purpose

Grinding a stump to 8 inches below the surface of the ground is the recommended way to remove stumps.

Charge to this Activity when removing stumps with a power stump grinder.

Special Requirements

None

Production Unit Calculation: Each stump ground.

July 2005

E20040 – PRUNING (T,S,V) LANDSCAPING

Production Unit: Each

Purpose

Charge to this Activity when trimming, shaping, or cutting back trees, shrubs, or vines. Included is hand pruning and pruning with hand-held power tools such as chain saws, loppers, shears, and edges.

Do not use this Activity for pruning groundcover (see 0E20042).

Special Requirements

None

Production Unit Calculation

Each plant pruned

E20041 – PRUNING - LINEAL MECHANICAL LANDSCAPING

Production Unit: Linear miles

Purpose

Pruning lineal mechanical is cutting back the side and tops of shrubs with a mechanical device. This method is usually applied to long medium plantings such as oleanders, but is applicable to other lineal plantings.

In general, the use of tractor-mounted mower heads should not be used to trim shrubs (oleanders, etc.), as they do not make smooth cuts, and they tend to tear. However, there are orchard cutter heads that make smooth cuts that are acceptable. Tractor-mounted mowers should not be used to prune trees at any time.

Charge to this Activity when mechanically pruning lineal plantings, including removing or chipping the trimmings.

Special Requirements

None

Production Unit Calculation : Each linear mile pruned. One mile = 5280 lineal feet.

July 2005

E20042 – PRUNING GROUNDCOVER LANDSCAPING

Production Unit: Linear feet

Purpose

Charge to this Activity when trimming, shaping, or cutting back groundcover. Included is hand pruning and pruning with hand held power tools such as loppers, shears and edges.

Do not use this Activity for pruning trees, shrubs, and vines (see E20040).

Special Requirements

None

Production Unit Calculation

Linear feet pruned.

E20050 – FERTILIZING LANDSCAPING

Production Unit: Acre

Purpose

The lack of vigorous growth and deep green coloring in the foliage of a plant is the best indication of the need for fertilizing.

Charge to this Activity when applying fertilizer by hand or machine to trees, shrubs, vines, or groundcovers.

Special Requirements

Contact your District Landscape Specialist if you need more information concerning proper fertilization.

Production Unit Calculation

Acres treated. One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

July 2005

**E20060 – REPAIR BASIN (T,S,V)
LANDSCAPING****Production Unit:** Each**Purpose**

Usually, a plant basin is a mound of soil encircling the base of plants to hold water for the plant's use. If the basin fails to hold water, it needs to be rebuilt.

Charge to this Activity when rebuilding or repairing basins around trees, shrubs, or vines.

Special Requirements

None

Production Unit Calculation

Each plant basin repaired.

**E30010 – IRRIGATION SYSTEM REPAIR
LANDSCAPING****Production Unit:** Each**Purpose**

Charge to this Activity when replacing or repairing any irrigation system component, except the electrical components, including repairs to pipes, bubblers, spray heads, valves, controller cabinets, backflow preventors, meters, valve boxes, or any other non-electrical component of an irrigation system.

Do not charge electrical repairs to this Activity (see E30011).

Special Requirements

None

Production Unit Calculation

Each repair completed.

July 2005

E30011 – IRRIGATION ELECTRICAL REPAIR LANDSCAPING

Production Unit: Each

Purpose

Charge to this Activity when replacing or repairing any electrical component of an irrigation system. This includes wiring, valve solenoids, electrical controllers, or any other electrical component of an irrigation system. *Charge non-electrical repairs to E30010.*

Special Requirements

None

Production Unit Calculation

Each repair completed.

E30013 – Backflow Preventer Certification LANDSCAPING

Production Unit: Each

Purpose

Charge to this Activity when performing Backflow Prevention Device “testing” at required frequency, or when testing the device due to evidence of a problem.

Do not charge time repairing a device to this Activity. Repairs should be charged to E30010.

Special Requirements

Backflow Prevention Device tests can only be performed by a Certified Backflow Prevention tester with a valid license.

Prior to performing any testing of devices, testers must be familiar with the regulations of local agencies, cities, and counties in their area, including any special qualification requirements that may apply; and documentation that must be completed.

Production Unit Calculation

Each backflow device tested.

July 2005

E30050 – IRRIGATING LANDSCAPING

Production Unit: Acre

Purpose

Charge to this Activity when using any method of irrigating landscape plantings, including manually operated systems, automatic systems, and hand watering, except when watering with a truck.

Do not charge truck watering to this Activity (see E30051).

Special Requirements

None

Production Unit Calculation

One acre = 43,560 sq. ft. 8' wide by 1 mile long is approximately one acre.

E30051 – TRUCK WATERING LANDSCAPING

Production Unit: Linear Miles

Purpose

Charge to this Activity when using a tanker truck or truck mounted tank to irrigate a landscape area, including hand watering through a hose, flood irrigating through a draft pipe, spraying water through truck mounted nozzles, or any other method of watering from a tanker or truck mounted tank.

Special Requirements

None

Production Unit Calculation

Linear miles watered by a tanker truck or truck mounted tank. One mile = 5280 lineal feet

If watering plants that are not in a lineal planting but scattered individual plants, use as a rule of thumb one plant watered = 5 lineal feet.

July 2005

**Caltrans VegCon Special Designation Numbers:
Weed and Insect Control/Eradication Efforts 6/10/2004**

Special Designation numbers should only be used to track noxious weed or insect control efforts when performing work in response to a request (from individuals or groups outside of Caltrans) and for controlling weeds and insects that Caltrans would normally not control. It is a good idea to have a letter on file or some type of documentation from the County Agriculture Commissioner endorsing the specific noxious weed or insect control/eradication project.

Weed List

Botanical Name – Common Name	Special Designation
Arundo donax – Giant Reed	Mweed01
Rubus procerus – Himalaya Blackberry - <i>(Also known as R. discolor)</i>	Mweed02
Cytisus scoparius, Spartium junceum and Cytisus canariensis - Scotch Broom, Spanish Broom and Canary Island Broom <i>formerly known as (synonymous with) the Genista family</i>	Mweed03
Centaurea diffusa – Diffuse Knapweed	Mweed04
Conyza canadensis – Horseweed <i>(Also known as Marestalk)</i>	Mweed05
Ulex europaeus – Gorse	Mweed06
Halogeton glomeratus - Halogeton	Mweed07
Sorghum halepense - Johnsongrass	Mweed08
Hypericum perforatum - Klamath Weed	Mweed09
Salvia aethiopis - Mediterranean Sage	Mweed10
Cortaderia selloana and Cortaderia jubata – Pampas Grass and Jubata Grass	Mweed11
Lepidium latifolium - Perennial Pepperweed - <i>(Also known as Tall Whitetop)</i>	Mweed12
Conium maculatum - Poison Hemlock	Mweed13
Tribulus terrestris – Puncturevine	Mweed14
Salsola iberica - Russian Thistle	Mweed15
Tamarix ramosissima – Saltcedar <i>(Also known as Tamarisk)</i>	Mweed16
Lygodesmia juncea - Skeleton Weed	Mweed17
Centaurea maculosa - Spotted Knapweed	Mweed18
Ageratina adenophora - Sticky Eupatorium <i>(Also known botanically as Eupatorium adenophorum)</i>	Mweed19
Melilotus officinalis – Sweetclover <i>(includes Yellow, White and Indian Sweetclovers)</i>	Mweed20
Helianthus annuus – Common Sunflower	Mweed21
Centaurea solstitialis - Yellow Starthistle	Mweed22
Foeniculum vulgare – Common Fennel <i>(Also known as Anise)</i>	Mweed23
Lythrum salicaria - Purple Loosestrife	Mweed24
Delairea odorata – Cape Ivy <i>formerly known as (synonymous with) Senecio mikanioides, German Ivy – previously recorded as Mweed05</i>	Mweed25
Ailanthus altissima – Tree-of-Heaven	Mweed26
Ricinus communis – Castor Bean	Mweed27
Eriogonum fasciculatum - California Buckwheat	Mweed28
Cynara cardunculus – Artichoke Thistle	Mweed29
Nicotiana glauca - Tobacco Plant	Mweed30
Cardaria draba - Hoary Cress <i>(Also known as Whitetop)</i>	Mweed31
Achnatherum brachychaetum – Punagrass	Mweed32
Schinus terebinthifolius – Brazilian Pepper Tree	Mweed33
Asphodelus fistulosus – Onion weed (Also known as Holoow-Stern Asphodel)	Mweed34

INSECT LIST	
Glassy-Winged Sharpshooter	Mglassy

July 2007

STORM WATER MANAGEMENT PROGRAM ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION		ASSET
F10003	TAILGATE MEETINGS (BMP)	EACH	Each	FAC, RW
F10004	GENERAL MEETINGS (MGMT/SUPPRT)	NONE	None	FAC,APP,RW
F10006	EMPLOYEE ORIENTATION/TRAINING	NONE	None	FAC
F10007	SPECIALIZED TRAINING (BMP'S)	NONE	None	FAC,RW
F20001	INSPECTION DRAIN INLET	EA	Each	FAC,RW
F20005	DRAIN STENCILING	EA	Each	APP,FAC,RW
F20050	DRAIN CLEANING	EA	Each	RW, FAC
F20051	SWEEP HIGHWAY/SHOULDER	LAMI	Lane mile	RW
F30001	FACILITY INSPECTION STORMWATER	NONE	None	FAC,RW
F30003	OVERSIGHT/INSPECT FIELD ACTIVITY	EACH	Each	FAC,RW,APP,BR
F30010	REPAIR/REPLACE CORRECTIVE	EA	Each	FAC,RW,APP,BR
F40001	INSPECT SOIL STAB/SEDIMENT/RSP	SHMI	SHMI	RW, FAC
F40010	REPAIR/REPLACE SOIL /SEDIMENT/RSP	SQYD	SQYD	FAC,RW
F40020	INSTALL SOIL STAB/SEDIMENT /RSP	SQYD	SQYD	RW, FAC
F40101	INSPECT/MONITOR STOCKPILES	EA	Each	RW, FAC
F40110	PERIMETER CONTROL STOCKPILES	EA	Each	RW, FAC
F40130	DISPOSE OF SURPLUS STOCKPILES	CUYD	CUYD	RW, FAC
F40210	SNOW HAULING (STORMWATER)	TN	Ton	APP,BR,RW, FAC
F50003	EVALUATE/DEVELOP DEICING	NONE	None	BR,RW, FAC
F50005	VEG MGMT & CHEM USE PLANS	NONE	None	APP,BR,FAC,RW
F50006	NPDES PERMIT RELATED ACTIVITY	NONE	None	APP,BR,FAC,RW
F50007	FIELD BMP	EACH	Each	APP,BR,FAC,RW
F60002	IC/ID INVESTIGATION AND REPORT	EA	Each	APP,FAC,RW
F60030	REMOVE ICID/ REMOVAL OVERSIGHT	EA	Each	APP,FAC,RW
F60050	CLEANUP OF ILLEGAL DISCHARGE	EA	Each	APP,FAC,RW
F70001	INSPECT SW STRUCTURAL BMP	EA	Each	APP (STBMP only)
F70010	REPAIR/REPLACE/ STRUCTURAL BMP	EA	Each	APP (STBMP only)
F70011	REPAIR/REPLACE/CLEAN SAND TRAP	EA	Each	APP (STBMP only)
F70050	CLEAN/MOW STRUCTURAL BMP	EA	Each	APP (STBMP only)
F80001	OVERSIGHT OF CONSTRUCTION	NONE	None	APP,BR,FAC,RW
F80101	OVERSIGHT DRAIN INSPECTION	NONE	None	APP,FAC,RW
F80201	OVERSIGHT DRAIN CLEAN CONTRACT	NONE	None	APP,FAC,RW
F80301	OVERSIGHT SAMPLE/TEST CONTRACT	NONE	None	APP,FAC,RW
F90001	INSPECT/OVERSIGHT DENITRIFICATION	NONE	None	FAC,RW
F90006	NPDES PERMIT ACTV DENITRIFICATION	NONE	None	FAC,RW
F90010	REPAIR/REPLACE DENITRIFICATION	NONE	None	FAC,RW
F90011	OPERATIONS DENITRIFICATION FAC	NONE	None	FAC,RW

July 2007

F10003 – TAILGATE MEETINGS (BMP) STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

This Activity Code is to ensure compliance with the Department's NPDES permit requirement for training and BMP implementation for Maintenance activities. Tailgate meetings familiarize Maintenance crews with the BMPs required for project specific activities and to review the Maintenance Storm Water Pollution Prevention Bulletins as they are released.

Special Requirements

In order to get the time spent on these meetings charged to the Maintenance Storm Water Management Program you must create a Work Order charged to Activity Code F10003.

Use TRAMS Activity Code 059.

(The Special Designation MSWTAILGATE will auto-populate.)

You can create one Work Order per month and charge time to it each time you have a Tailgate BMP Meeting.

Tailgate BMP Meetings shall be held at a minimum of every 10 working days or every time you change job assignments or type of work activity.

Production Unit Calculation

Each

October 2006

**F10004 – GENERAL MEETINGS (MGMT/SUPPRT)
STORM WATER MANAGEMENT PROGRAM****Production Unit:** None**Purpose**

This Activity is for meetings related to management and support issues for implementing the Maintenance Storm Water Management Program. These meetings include program assessments, in-house policy reviews, and meetings related to budget issues with district and/or HQ staff.

Do not use this Activity for meetings related to the evaluation and development of de-icing criteria, Vegetative and Chemical Use Plans, and SWMP/MSWAT meetings (see F5xxxx).

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

None

October 2006

**F10006 – EMPLOYEE ORIENTATION/TRAINING
STORM WATER MANAGEMENT PROGRAM****Production Unit:** None**Purpose**

This Activity is for district and HQ employee orientation and training meetings for the Maintenance Storm Water Management Program.

Special Requirements

Use TRAMS Activity Code 059.

The Division of Maintenance has developed staff Storm Water Management Program training materials. Hours involved in reviewing and attending classes related to these training materials are charged to this Activity.

The Division of Maintenance Storm Water Training course number G31430 must be included on Form 300 when training completed.

Production Unit Calculation

None

October 2006

F10007 – SPECIALIZED TRAINING (BMP'S) STORM WATER MANAGEMENT PROGRAM

Production Unit: None

Purpose

This Activity is for hands-on Maintenance training for specialized structural BMPs. This includes structural BMPs such as Continuous Deflection Separators, media filters, oil/water separators, multi-chambered treatment trains, wetlands/basins, bio-strips/swales, and gross solids removal devices.

Do not use this Activity for training in the use of fleet equipment.

Special Requirements

Use TRAMS Activity Code 059.

Production Unit Calculation

None

October 2006

F20001 – INSPECTION DRAIN INLET STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

This inspection is for the determination of potential storm water related impacts.

Do not charge pump house related inspections to this Activity (see J10001).

Special Requirements

Charge to this code:

- If you are required to conduct an enhanced storm drain inlet inspection program in San Diego, Orange, Los Angeles and Ventura Counties.
- If you are required to conduct an inspection under another mandate, or directed by lawsuit or consent decree from a RWQCB.

Refer to sections C.22.1 and C.22.2 of the Caltrans Storm Water Quality Handbook Maintenance Staff Guide (May 2003).

Use TRAMS Activity Code 036

Production Unit Calculation

Each

October 2006

F20005 – DRAIN STENCILING STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

Stenciled messages at storm drain inlets are intended to educate the public about storm water runoff pollution. Where required, warnings prohibiting discharges to storm drains should be placed near inlet structures. Though storm drain stenciling is included as a BMP, it is a specially funded BCP activity and has been designated its own Activity Code to track expenditures.

All staff time related to storm drain stenciling/markings is to be charged to this Activity. This includes: storm drain marker ordering, receiving and storage, activities related to Caltrans' staff installation, the preparation of any contracts or agreements, related meetings, and oversight of any contracted installation.

Storm drain stenciling is approved for Park-and-Ride lots, Safety Roadside Rest Areas, vista points, commercial vehicle enforcement facilities, and along roads and highways legally accessible by the public in developed communities with a population greater than 10,000. Stenciling is also approved for areas that traverse through cities, towns, and communities with populations of 10,000 or more (or less, if the area is covered by a MS4 permit). Stenciling is not required in areas where pedestrians are prohibited.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation:

Each

October 2006

F20050 – DRAIN CLEANING STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

This Activity is specifically for Storm Water Program mandated drain cleaning work.

Charge to this code:

- If the cleaning is a requirement of the enhanced storm drain inlet cleaning program in San Diego, Orange, Los Angeles and Ventura Counties.
- If the drain cleaning is a requirement under another mandate or directed by lawsuit or consent decree from a RWQCB.

Refer to sections C.22.1 and C.22.2 of the Caltrans Storm Water Quality Handbook Maintenance Staff Guide (May 2003).

Current Division of Maintenance policy is that drain cleaning activities are to maintain hydraulic capacity and highway safety and are charged to the “C” Family.

Do not use this Activity for cleaning and maintenance of pump house drains (see J10005). This work is considered part of the pump house structure.

Protecting drains during other maintenance activities as a BMP is charged to F50007.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Each

October 2006

F20051 – SWEEP HIGHWAY/SHOULDER**Production Unit:** Lane miles**Purpose**

All highway and shoulder sweeping, with the exception of rest areas, vista points, and Park and Ride lots is charged to this Activity. (Activity D30000 has been expired).

For roadside rests, vista points, and Park and Ride lots, charge to the appropriate “G” Family Activity.

Special Requirements

The number of “tons” completed for each day’s work shall be entered in the Spot Inspection tab for all sweeping which is **mandated**, directed by consent/decreed, or lawsuit by the Water Board. Questions regarding whether or not a location is considered “mandated” should be directed to your District Storm Water Coordinator.

Use TRAMS Activity Code 036

Production Unit Calculation

Lane miles

October 2006

**F30001 – FACILITY INSPECTION STORMWATER
STORM WATER MANAGEMENT PROGRAM****Production Unit :** None**Purpose**

The following are charged to this Activity:

- 20% per year facility inspections required by the SWMP and restated in the Annual Maintenance Facilities Compliance Review Plan.
- Monthly supervisor inspections of Maintenance facilities to monitor the implementation and adequacy of current Best Management Practices.
- Facility inspections conducted as Department “self audit”.

Special Requirements

Use TRAMS Activity Code 052.

Supervisor FPPP inspection reports will be maintained for a period of 3 years.

Production Unit Calculation :

None

October 2006

**F30003 – OVERSIGHT/INSPECT FIELD ACTIVITY
STORM WATER MANAGEMENT PROGRAM****Production Unit:** Each**Purpose**

The following are charged to this Activity:

- Maintenance field activity inspections performed by supervisors as SWMP required compliance monitoring (Section 8.4.2).
- Reviews conducted under the Annual Maintenance Activity Compliance Review Plan (self-audit).

This Activity includes oversight of contracted maintenance field activities inspections.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Each

October 2006

F30010 – REPAIR/REPLACE CORRECTIVE MEASURE STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

This Activity is for corrective actions taken as a result of the implementation of Maintenance facility and field activity inspections.

The Maintenance Region Manager is responsible for corrective measures at Maintenance sites with major or critical storm water management program deficiencies.

Special Requirements

Use TRAMS Activity Code 036 for field activities.

Use TRAMS Activity Code 052 for facilities.

Production Unit Calculation

Each

July 2007

**F40001 – INSPECT SOIL STAB/SEDIMENT/RSP
STORM WATER MANAGEMENT PROGRAM****Production Unit:** Shoulder Mile**Purpose**

This Activity is to be used for:

- Inspections of roadside vegetated slopes for erosion as required by the SWMP. The inspections are conducted on a five (5) year cycle (MISST).
- Inspections conducted at the time of Maintenance staff response to a slide or slip-out.

Special Requirements

A standard Maintenance Division reporting format for scheduling, inspection findings, and repairs has been developed for the program. The Preliminary Maintenance Slope Inspection Form (number CT-MAINT-NPDE-S005) is to be used and is available electronically from the Department's Headquarters Maintenance Storm Water Unit. Areas with recurring problems should be inspected on an as-needed basis.

Use TRAMS Activity Code 036

Production Unit Calculation

Shoulder Mile

July 2007

F40010 – REPAIR/REPLACE SOIL/SEDIMENT/RSP STORM WATER MANAGEMENT PROGRAM

Production Unit: Square Yards

Purpose

This Activity is for field work to repair/replace existing roadside erosion controls and/or existing soil and slope stabilization materials.

This Activity can be used for repairs to controls and/or material replacements recommended on a Maintenance Inspection Slope Stabilization Team inspection form.

Work required for NPDES permit compliance as a result of natural eroding conditions or post-construction erosion control failures.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Square Yards

F40020 – INSTALL SOIL STAB/SEDIMENT/RSP STORM WATER MANAGEMENT PROGRAM

Production Unit: Square Yards

Purpose

This Activity is for field work to install new roadside erosion controls and soil/slope stabilization materials such as mats, wattles, and rock slope protection (RSP).

This Activity Code is also for:

- Work to install new vegetated slope erosion controls identified by the MISST program, and
- Work to install new erosion controls required for NPDES permit/Water Board compliance.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Square Yards

October 2006

F40101 – INSPECT/MONITOR STOCKPILES STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

This Activity is for the inspection and monitoring of stockpiles to ensure they are stable and protected from migrating into surface water inlets.

For coding purposes definitions have been established:

- A “Usable Stockpile” is the storage of intended usable material. For example, soil may be excavated from a site, stockpiled in a designated storage area, and then delivered as fill material to a different site.
- A “Surplus Stockpile” is not intended to be reused and is subject to disposal. A “Surplus Stockpile” is not composed of snow and/or ice.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Each

October 2006

F40110 – PERIMETER CONTROL STOCKPILES STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

This Activity is for stockpile storage site stabilization. This may include the installation of BMPs such as temporary asphalt berms and fiber rolls.

Special Requirements

This Activity may include establishing perimeter controls identified as needed on a MISST slope inspection form where slope erosion conditions might affect stockpile stability.

Use TRAMS Activity Code 036

Production Unit Calculation

Each

July 2007

F40130 – DISPOSAL OF SURPLUS STOCKPILES STORM WATER MANAGEMENT PROGRAM

Production Unit: Cubic Yards

Purpose

This Activity is for the disposal of “Surplus Stockpiles” which are stockpiles not intended to be reused. Charge all the disposal work, including the removal of perimeter controls, loading, hauling and unloading to this Activity.

Do not use this Activity for the relocation of reusable material stockpiles from one location to another.

Do not use this Activity for mandated snow and ice hauling (see F40210).

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Cubic Yards

F40210 – SNOW HAULING (STORMWATER) STORM WATER MANAGEMENT PROGRAM

Production Unit: Tons

Purpose

This Activity shall be used where snow and ice hauling is required **for environmental regulatory compliance**. This is applicable to snowplow created stockpiles of ice and snow. The use of this Activity Code is restricted to regulated snow and ice haul.

Do not use this Activity for cinder or traction sand disposal hauling.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Tons

July 2007

F50003 – EVAL/DEVELOP DEICING CRITERIA STORM WATER MANAGEMENT PROGRAM

Production Unit: None

Purpose

This Activity is for any independent and/or cooperative work and meetings with the RWQCB offices to develop and evaluate selection criteria for de-icing agents.

Section 5.3.10 R Family (Snow and Ice Control) of the SWMP states:

“Snow removal and ice control include snow removal operations and opening of drainage inlets that get covered or blocked by snow and ice. Because salt, deicing chemicals and abrasives may pollute storm water runoff, the Department uses no more than the minimum amount of these materials necessary for effective snow and ice control. The minimum amount of salt will be applied at the most effective time, as determined by the snowstorm severity, duration and temperature. The Department will continue to work cooperatively with RWQCB offices in the snowy areas of the State to evaluate and develop selection criteria for de-icing agents. These types of materials may have significant adverse impacts on receiving waters.”

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

None

October 2006

**F50005 – VEG MGMT & CHEM USAGE PLANS
STORM WATER MANAGEMENT PROGRAM****Production Unit:** None**Purpose**

This Activity is for work related to expanded District Vegetation Control Plan elements and plan preparations.

Chemical vegetative control measures will not be used on vegetated treatment BMPs except where the Department is directed by the California Department of Food and Agriculture to treat the BMPs for invasive weeds. The Department will report on the directed usage of chemical vegetative controls in its annual report.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

None

October 2006

F50006 – NPDES PERMIT RELATED ACTIVITY STORM WATER MANAGEMENT PROGRAM

Production Unit: None

Purpose

This Activity is for work relating specifically to administrative aspects of the Caltrans statewide NPDES Permit and SWMP, including:

- Permit compliance (establishing the program elements).
- Reporting of Department non-storm water discharges (IC/ID is charged to F60002).
- NPDES Reporting requirements, CARS Annual Report Data Collection.
- District Workplans.
- SWMP reviews and meetings.
- MSWAT meetings and task force activities.
- Preparation and submittal of Storm Water Program reports not having another specific Activity are charged here.

If other agency permits are required in order to implement the conditions of the Department's Statewide NPDES permit, the work related to their preparation, submittal, and any necessary follow up is to be charged to this Activity.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

None

July 2007

F50007 – FIELD ACTIVITY/ FACILITY BMPS STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

This Activity is for the general implementation of the BMPs included in the SWMP Guidelines and the Caltrans Storm Water Quality Handbook Maintenance Staff Guide related to Maintenance field activity work.

Do not use This Activity Code for:

- Drain Stenciling (see F20005).
- Sand Trap Cleaning (see F70011.).
- Stockpile Management (see F40101, F40110, F40130).
- Snow Haul (F40210).

These have their own Activity Codes and Special Designations because of special BCP funding.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Each

July 2007

F60002 – ICID INVESTIGATION & REPORT STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

The SWMP directs Maintenance staff to detect and report illicit connections and illegal discharges (IC/ID) into Caltrans storm water drainage systems. This Activity is for all work related to this SWMP requirement.

Special Requirements

Maintenance personnel, as part of their routine inspections and maintenance work, shall report all observed suspected illicit connections and illegal discharges to the District Maintenance Storm Water Coordinator, who will forward these observations to the NPDES Storm Water Coordinator. A Storm Water Pollution/Drainage report form has been developed and is available from the Division of Maintenance Headquarters Storm Water Unit.

All public-initiated calls should be directed to the District's Public Affairs Officer. Calls regarding illicit connections and illegal discharges should be logged and routed to the NPDES Storm Water Coordinator. Response and permitting or removal of illegal connections will be in accordance with Section 1.3.3 of the Statewide SWMP.

Use TRAMS Activity Code 036

Production Unit Calculation

Each

October 2006

**F60030 – REMOVE ICID /REMOVAL OVERSIGHT
STORM WATER MANAGEMENT PROGRAM****Production Unit:** Each**Purpose**

This Activity is for the removal of illicit connections. Illicit connections are connections to Caltrans drainage systems that have not been approved by Caltrans. This Activity is directed at continuous or recurring discharges through direct connections to storm water drainage systems or as run-on from adjacent properties. This Activity Code includes the oversight of contracted illicit connection removal services.

Do not use “F8” Activity Codes for Illicit Connection contract oversight. Oversight of illicit connection removal is a separately funded activity.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Each

October 2006

F60050 – CLEANUP OF ILLEGAL DISCHARGE STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

This Activity is for work required to clean up illegal discharges that have affected the Department's storm water collection system.

Special Requirements

If suspected hazardous materials or hazardous waste dumping has occurred, Maintenance Supervisors shall report the incident to the District Maintenance Hazardous Materials Manager. Spill cleanup shall be handled in accordance with the legal authority presented in Section 2.6 of the SWMP.

Use TRAMS Activity Code 036

Production Unit Calculation

Each

October 2006

F70001 – INSPECT STRUCTURAL BMP STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

This Activity is for the inspection of structural BMPs. This includes retrofit controls and permanent structural BMPs such as infiltration basins, detention devices, biofiltration swales and strips, filter systems, and sand traps.

The inspection of traction sand traps is charged to this Activity. The operational maintenance activities for sand traps have their own Activity (F70011) due to separate BCP funding.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Each

October 2006

F70010 – REPAIR/REPLACE STRUCTURAL BMP STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

This Activity Code is for those structural BMPs requiring mechanical repair, replacement, and special maintenance.

- **Do not** use for traction sand trap operational maintenance. Sand trap maintenance is an F70011 activity due to separate BCP funding.

Special Requirements

This Activity includes repairing and replacing parts for the systems constructed as part of the BMP Retrofit Pilot Program. For example, several of the pilot BMPs may require specific maintenance such as canister removal and replacement on specialized filter units.

This Activity includes work to revegetate bio-strips and bio-swales.

Prior to intrusive maintenance at any BMP, Maintenance personnel should check with a District Biologist to ensure there are no endangered species, threatened species, or species of special concern within the BMP maintenance area. For applicable areas, emergent habitat could attract endangered or threatened species, or species of concern whose residence would prevent necessary maintenance. If BMP function will not be impaired, remove habitat or discourage attraction as recommended by District Environmental Program. Refer to Section C.23 of the Caltrans Storm Water Quality Handbook Maintenance Staff Guide (May 2003).

Use TRAMS Activity Code 036

Production Unit Calculation

Each

October 2006

**F70011 – REPAIR/REPLACE/CLEAN SAND TRAP
STORM WATER MANAGEMENT PROGRAM****Production Unit:** Each**Purpose**

This Activity is for the separately funded BCP allotment for traction sand trap cleaning and maintenance. Sand traps are to be maintained and repaired when necessary to maintain their proper function. Refer to the Storm Water Quality Handbook, Maintenance Staff Guide, Appendix C.23.4.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Each

October 2006

F70050 – CLEAN/MOW STRUCTURAL BMP STORM WATER MANAGEMENT PROGRAM

Production Unit: Each

Purpose

This Activity is for:

- The cleaning of structural BMPs, including the removal of litter and debris from separation devices.
- Removal of litter and debris from vegetated treatment systems.
- Mowing of vegetated treatment systems (bio-swales and bio-strips).

The Division of Maintenance shall follow its BMPs to mow grass lined swales and strips and to remove trash and debris. (See SWMP Section 5.5.1).

Do not charge structural BMP repair/parts replacement work to this code. For example, the revegetation or the replacement of sod in a vegetated treatment system is Activity F70010.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

Each

October 2006

F80001 – OVERSIGHT OF CONSTRUCTION CONTRACT STORM WATER MANAGEMENT PROGRAM

Production Unit: None

Purpose

This Activity is for oversight of Maintenance Storm Water Management Program contracted construction work. For example, Maintenance staff overseeing contracted work required for slope stabilization and/or sediment control would be charged to this code.

Do not use this Activity Code for oversight of storm drain stenciling/marker contracts. All storm drain stenciling activities are charged to F20005

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

None

October 2006

F80101 – OVERSIGHT DRAIN INSPECTION CONTRACT STORM WATER MANAGEMENT PROGRAM

Production Unit: None

Purpose

This Activity is for oversight of Maintenance Storm Water Management Program contracted storm drain inspection work.

Section 5.3.2.2 of the SWMP describes the Department's Enhanced Storm Drain Inlet Inspection and Cleaning Program.

In the metropolitan portions of Los Angeles, San Diego, Orange, and Ventura Counties, the storm drain inlets are inspected annually to determine if cleaning is necessary. These inspections are to occur prior to the rainy season. This Activity is for oversight of contracts to complete this work.

Inspection and cleaning work is reported annually by section of highway as a tool for program evaluation. Refer to Section C.22.2 of the Caltrans Storm Water Quality Handbook Maintenance Staff Guide (May 2003).

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

None

October 2006

F80201 – OVERSIGHT DRAIN CLEAN CONTRACT STORM WATER MANAGEMENT PROGRAM

Production Unit: None

Purpose

This Activity is for oversight of Maintenance Storm Water Management Program's contracted storm drain cleaning work.

Section 5.3.2.2 of the SWMP describes the Department's Enhanced Storm Drain Inlet Inspection and Cleaning Program. In metropolitan portions of Los Angeles, San Diego, Orange, and Ventura Counties, storm drain inlets are inspected prior to the rainy season. As a result of the inspections, those drain inlets needing cleaning are cleaned prior to the rainy season. This Activity Code is for oversight of contracts awarded for this work.

Refer also to Section C.22.2 of the Caltrans Storm Water Quality Handbook Maintenance Staff Guide (May 2003).

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

None

October 2006

**F80301 – OVERSIGHT SAMPLE/TEST CONTRACT
STORM WATER MANAGEMENT PROGRAM****Production Unit:** None**Purpose**

This Activity is for oversight of Maintenance Storm Water Management Program soil and water sample collection and laboratory sample testing contracts.

Do not use this Activity for soil and water sample collecting and testing for the Maintenance HAZMAT program.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

None

October 2006

F90001 – INSPECT/OVERSIGHT DENITRIF FAC STORM WATER MANAGEMENT PROGRAM

Production Unit: None

Purpose

This Activity is intended for Maintenance staff inspection and oversight of the general operation of the Walnut Avenue Pump Station and Treatment Plant in Irvine, California. The Department is expected to assume ownership of this water treatment facility located alongside the Eastern Transportation Corridor, Route 261 Toll Road. This plant treats approximately 1 million gallons per day of ground water that is pumped for stabilization of the roadway. The operation of this facility is necessary for Regional Water Quality Control Board discharge compliance prior to the groundwater's discharge

Do not use this Activity for Statewide NPDES Storm Water Permit work.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

None

October 2006

F90006 – NPDES PERMIT ACTV DENITRIF FAC STORM WATER MANAGEMENT PROGRAM

Production Unit: None

Purpose

This Activity Code is intended for Maintenance staff NPDES permit work for the Walnut Avenue Pump Station and Treatment Plant in Irvine, California. The Department is expected to assume ownership of this water treatment facility located alongside the Eastern Transportation Corridor, Route 261 Toll Road.

Do not use this Activity Code for Statewide NPDES Storm Water Permit work.

Special Requirements

NPDES permit work may include the preparation and application of an NPDES permit and the required compliance plan. Other work may include meetings with Department and regulatory agency staff and the preparation and submittal of any required compliance reports and correspondence.

Use TRAMS Activity Code 036

Production Unit Calculation

None

October 2006

**F90010 – REPAIR/REPLACE DENITRIFICATION FAC
STORM WATER MANAGEMENT PROGRAM****Production Unit:** None**Purpose**

This Activity Code is intended for Maintenance staff repair and parts replacement work at the Walnut Avenue Pump Station and Treatment Plant in Irvine, California. The Department is expected to assume ownership of this water treatment facility located alongside the Eastern Transportation Corridor, Route 261 Toll Road.

For example, the replacement of spent methane tanks for denitrification treatment processes and system fuses or repair of pipe fixtures would be charged to this code. The Department expects most O&M at this facility to be under contract; however, Department Maintenance staff may be requested to assist.

Do not use this Activity for Statewide NPDES Storm Water Permit work.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

None

October 2006

F90011 – OPERATIONS DENITRIFICATION FAC STORM WATER MANAGEMENT PROGRAM

Production Unit: None

Purpose

This Activity is for Division of Maintenance staff preparation, award, and administration of a water treatment facility O&M contract for the Walnut Avenue Pump Station and Treatment Plant in Irvine, California. The Department is expected to assume ownership of this water treatment facility located alongside the Eastern Transportation Corridor, Route 261 Toll Road.

Do not use this Activity Code for Statewide NPDES Storm Water Permit work.

Do not use this Activity Code for Maintenance Staff day to day oversight of water treatment plant operations.

Special Requirements

Use TRAMS Activity Code 036

Production Unit Calculation

None

July 2006

ROADSIDE RESTS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
G10001	INSPECTION G FAMILY	NONE	None	APP
G10002	COMPLAINT INVESTIG. G FAMILY	EAOC	Each Occurrence	APP
G10005	SPECIAL PROG ADMIN	NONE	None	APP
G10009	USA G FAMILY	EAOC	Each Occurrence	APP
G10010	FACILITY REPAIR	NONE	None	APP
G10011	ELECTRICAL REPAIR	NONE	None	APP
G10012	GROUNDS MAINTENANCE	NONE	None	APP
G10013	WATER TREATMNT	EA	Each	APP
G10050	JANITORIAL	HR	Hour(s)	APP

VISTA POINTS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
G20005	SPECIAL PROG ADMIN	NONE	None	APP
G20010	FACILITY REPAIR	NONE	None	APP
G20011	ELECTRICAL REPAIR	NONE	None	APP
G20012	GROUNDS MAINTENANCE	NONE	None	APP

INSPECTION STATIONS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
G30005	SPECIAL PROGRAMS ADMIN.	NONE	None	APP
G30010	FACILITY REPAIR	NONE	None	APP
G30011	ELECTRICAL REPAIR	NONE	None	APP
G30012	GROUNDS MAINTENANCE	NONE	None	APP
G30013	WATER TREATMNT	EA	Each	APP

PARK AND RIDES ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
G40003	MAINT AGREEMENT MGMT	NONE	None	APP
G40010	FACILITY REPAIR	NONE	None	APP
G40011	ELECTRICAL REPAIR	NONE	None	APP
G40012	GROUNDS MAINTENANCE	NONE	None	APP

July 2006

G10001 – INSPECTION G FAMILY

Production Unit: None

Purpose

Perform routine inspections to ensure facilities are kept in a safe and good operating condition. Also inspect for work scheduling of Caltrans Maintenance forces and private contracts.

Do not charge inspection of the Sheltered Workshop program or other Special Programs to this Activity (see G10005).

Special Requirements

None

Production Unit Calculation

None

G10002 – COMPLAINT INVESTIGATION G FAMILY

Production Unit: Each occurrence

Purpose

Complaints should be responded to quickly. Investigate the complaint to determine the best way to respond to the complainants. This includes, but is not limited to, investigation, travel time, and response to the parties making the complaint.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

None

Production Unit Calculation

Each occurrence

July 2006

G10005 – SPECIAL PROGRAM ADMINISTRATION ROADSIDE RESTS

Production Unit: None

Purpose

This Activity is to be used for time spent inspecting, reviewing and consulting with the Sheltered Workshop Program and other Special Program organizations when working in the rest areas. This Activity is also used for handling the supplies provided by Caltrans and distributed by the Sheltered Workshops.

Special Requirements

None

Production Unit Calculation

None

G10009 – USA G FAMILY

Production Unit: Each occurrence

Purpose

Underground Service Alert needs to be used before digging in the Safety Roadside Rest Areas (SRRA). Charge to this Activity time spent on getting the USA clearance.

Special Requirements

None

Production Unit Calculation

Each occurrence

July 2006

G10010 – FACILITY REPAIR ROADSIDE RESTS

Production Unit: None

Purpose

Charge all repairs to the Safety Roadside Rest Areas (SRRA) to this Activity, including, but not limited to, repairing of sidewalk, parking lot, structural, tile work, partition repair or replacement, kiosks, roofs, painting, etc.

Do not use his Activity for:

- Janitorial work or grounds keeping (see G10012 or G10050).
- Electrical repairs to the facility (see G10011).

Special Requirements

None

Production Unit Calculation

None

G10011 – ELECTRICAL REPAIR ROADSIDE RESTS

Production Unit: None

Purpose

This Activity is used for repairing of all electrical and lighting systems in the SRRAs, and is normally completed by the electrical crews.

Special Requirements

None

Production Unit Calculation

None

July 2006

G10012 – GROUNDS MAINTENANCE ROADSIDE RESTS

Production Unit: None

Purpose

This Activity is used to charge Caltrans time for maintenance of rest area landscape, turf, irrigation, shrubs, and trees, etc.

Special Requirements

None

Production Unit Calculation

None

G10013 – WATER TREATMENT MAINT ROADSIDE RESTS

Production Unit: Each

Purpose

This Activity is used to charge time for the maintenance, inspection, repairs, and testing of water treatment systems in the SRRAs.

Special Requirements

None

Production Unit Calculation

Each

July 2006

**G10050 – JANITORIAL
ROADSIDE RESTS****Production Unit:** Hours**Purpose**

Charge time for cleaning and restocking comfort stations at rest areas to this Activity, including, but not limited to, cleaning floors, toilets, urinals, filling soap dispensers, emptying trash cans, picking up litter, cleaning picnic tables, removing graffiti, etc.

Special Requirements

None

Production Unit Calculation

Hours

**G20005 – SPECIAL PROGRAM ADMINISTRATION
VISTA POINTS****Production Unit:** None**Purpose**

This Activity is to be used for time spent inspecting, reviewing, and consulting Special Program crews when working in the vista points.

Special Requirements

None

Production Unit Calculation

None

July 2006

G20010 – FACILITY REPAIR VISTA POINTS

Production Unit: None

Purpose

Charge all repairs to the facility to this Activity, including, but not limited to, repairing of sidewalk, parking lot, and painting, etc.

Special Requirements

None

Production Unit Calculation

None

G20011 – ELECTRICAL REPAIR VISTA POINTS

Production Unit: None

Purpose

This Activity is used for repairing of all electrical and lighting systems in the rest area, and is normally completed by the electrical crews.

Special Requirements

None

Production Unit Calculation

None

July 2006

G20012 – GROUNDS MAINTENANCE VISTA POINTS

Production Unit: None

Purpose

This Activity includes maintaining, repairing and replacing plants, weed control, litter pick up, sweeping, emptying trash cans, repairing fences, railings, sign monuments, etc.

Special Requirements

None

Production Unit Calculation

None

G30005 – SPECIAL PROGRAM ADMINISTRATION INSPECTION STATIONS

Production Unit: None

Purpose

This Activity is to be used for time spent inspecting, reviewing, supervising, and consulting with Special Program crews when working in the inspection stations.

Special Requirements

None

Production Unit Calculation

None

July 2006

G30010 – FACILITY REPAIR INSPECTION STATIONS

Production Unit: None

Purpose

This Activity covers time spent maintaining the buildings, appurtenances, water and pump systems, parking lots, sidewalks, etc., which are **not** listed as a responsibility of the California Highway Patrol (CHP) in the Interagency Agreement.

Special Requirements

Caltrans has an Interagency Agreement with the Department of California Highway Patrol (CHP) for the routine maintenance of the inspection facilities. Read Exhibit “A” of the Interagency Agreement for a list of the items that the CHP will maintain.

Production Unit Calculation

None

G30011 – ELECTRICAL REPAIR INSPECTION STATIONS

Production Unit: None

Purpose

This Activity is used for repairing of all electrical and lighting systems in the rest area that are not covered by the Interagency Agreement and is normally completed by the electrical crews.

Special Requirements

Caltrans has an Interagency Agreement with the Department of California Highway Patrol (CHP) for the routine maintenance of the Inspection Facilities. Read Exhibit “A” of the Interagency Agreement for a list of the items that the CHP will maintain.

Production Unit Calculation

None

July 2006

G30012 – GROUNDS MAINTENANCE INSPECTION STATIONS

Production Unit: None

Purpose

This Activity includes maintaining plants, trees, weed control, litter pick-up, sweeping, emptying trashcans, landscaping, and irrigation systems, etc.

Grounds maintenance is normally accomplished by CHP through the Interagency Agreement at most inspection facilities.

Special Requirements

Caltrans has an Interagency Agreement with the Department of California Highway Patrol (CHP) for the routine maintenance of the Inspection Facilities. Read Exhibit “A” of the Interagency Agreement for a list of the items that the CHP will maintain.

Production Unit Calculation

None

G30013 – WATER TREATMENT MAINT INSPECTION STATIONS

Production Unit: Each

Purpose

This Activity is used to charge time for the maintenance, inspection, repairs, and testing of water treatment systems in at Inspection Stations.

Special Requirements

None

Production Unit Calculation

Each

July 2006

G40003 – MAINTENANCE AGREEMENT MGMT PARK AND RIDES

Production Unit: None

Purpose

This Activity is to be used for all time spent preparing, consulting with, arbitrating, and managing Maintenance Agreements for the Park and Ride lots.

Special Requirements

None

Production Unit Calculation

None

G40010 – FACILITY REPAIR PARK AND RIDES

Production Unit: None

Purpose

Charge all repairs to the facility to this Activity, including, but not limited to, repairing of sidewalk, parking lot, bicycle lockers, and painting fences and railings, etc.

Special Requirements

None

Production Unit Calculation

None

July 2006

G40011 – ELECTRICAL REPAIR PARK AND RIDES

Production Unit: None

Purpose

This Activity is used for repairing of all electrical and lighting systems in the rest area and is normally completed by the electrical crews.

Special Requirements

None

Production Unit Calculation

None

G40012 – GROUNDS MAINTENANCE PARK AND RIDES

Production Unit: None

Purpose

This Activity includes maintaining plants, trees, weed control, litter pick-up, sweeping, emptying trash cans, landscaping, irrigation systems, etc. in Park and Ride lots.

Special Requirements

None

Production Unit Calculation

None

July 2006

BRIDGES ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
H10001	INSPECTION – H FAMILY	EAOC	Each Occurrence	BR
H10002	COMPLAINT INVESTIG. – H FAMILY	EAOC	Each Occurrence	BR
H10010	BMS SUB – PATCH SPALLS	NONE	None	BR
H10011	BMS SUB – REPLACE	NONE	None	BR
H10012	BMS SUB – REHAB	NONE	None	BR
H10013	BMS SUB – EPOXY INJECT	NONE	None	BR
H10021	INSTALL GRAFITTI DETERENT	EAOC	Each Occurrence	BR
H10040	BMS SUB – PROTECT	NONE	None	BR
H10050	CLEAR DEBRIS/CHANNEL CLEANING	EAOC	Each Occurrence	BR
H10060	BMS SUB – PAINT	NONE	None	BR
H10070	BIRD NETTING / EXCLUSION	EAOC	Each Occurrence	BR
H10090	BMS SUB - MISC.	NONE	None	BR
H20010	BMS SUPER – PATCH SPALLS	NONE	None	BR
H20011	BMS SUPER – REPLACE	NONE	None	BR
H20012	BMS SUPER – REHAB	NONE	None	BR
H20013	BMS SUPER – EPOXY INJECT	NONE	None	BR
H20070	REPLACE GATES – SUPER	EAOC	Each Occurrence	BR
H20090	BMS SUPER – MISC.	NONE	None	BR
H30011	BMS DECK – REPLACE	NONE	None	BR
H30012	BMS DECK – REHAB	NONE	None	BR
H30013	BMS DECK – RESURFACE	NONE	None	BR
H30020	BMS DECK - PATCH SPALLS	NONE	None	BR
H30030	BMS DECK - REPAIR POTHOLE	NONE	None	BR
H30050	BMS DECK – METHACRYLATE	NONE	None	BR
H30060	BMS DECK - PLACE OVERLAY	NONE	None	BR
H30070	BMS DECK – REPAINT	NONE	None	BR
H30090	BMS DECK - MISC.	NONE	None	BR
H31011	BMS APPROACH SLAB – REPLACE	NONE	None	BR
H31080	BMS APPROACH SLAB – MUDJACK	NONE	None	BR

July 2006

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
H40010	BMS JOINTS – REPAIR	NONE	None	BR
H40011	BMS JOINTS – REPLACE	NONE	None	BR
H40012	BMS JOINTS – REHAB	NONE	None	BR
H41012	BMS BEARINGS – REHAB	NONE	None	BR
H41050	BMS BEARINGS – CLEAN	NONE	None	BR
H50010	BMS RAILING – REPAIR	NONE	None	BR
H50011	BMS RAILING – REPLACE	NONE	None	BR
H50012	BMS RAILING – REHAB	NONE	None	BR
H50060	BMS RAILING – PAINT	NONE	None	BR
H60050	CLEAN PAN,GUTTER,DRAINAGE SYS	EAOC	Each Occurrence	BR
H70060	RIGGING CONTAINMENT – PAINT	NONE	None	BR
H70061	SPOT REMOVAL & SPOT PAINT	SQFT	Square Feet	BR
H70062	SPOT REMOVAL & FULL PAINT	SQFT	Square Feet	BR
H70063	FULL REMOVAL & FULL PAINT	SQFT	Square Feet	BR
H70069	OTHER PAINT ACTIVITIES	NONE	None	BR,FAC,RW
H80010	BMS MECH/ELECTRICAL REPAIR	NONE	None	BR
H80011	BMS MECH/ELECTRICAL REPLACE	NONE	None	BR
H80012	BMS MECH/ELECTRICAL REHAB	NONE	None	BR
H80090	BMS MECH/ELECTRICAL MISC.	NONE	None	BR
H90011	BMS BRIDGE – REPLACE	NONE	None	BR
H91010	BMS SEISMIC – MAINTENANCE	NONE	None	BR
H91040	BMS SEISMIC – RETROFIT	NONE	None	BR
H92080	DRAWBRIDGE OPERATION & MAINT	NONE	None	BR

July 2006

H10001 – INSPECTION

H FAMILY

Production Unit: Each occurrence

Purpose

Perform routine inspection of ALL bridge elements including abutments, backwalls, wingwalls, piers, pier fenders, footings, columns, struts, caps, pile extensions, culverts, tunnels, and other components.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

Each occurrence (each inspection)

July 2006

H10002 – COMPLAINT INVESTIGATION

H FAMILY

Production Unit: Each occurrence

Purpose

Perform an inspection on a bridge element when a complaint has been received.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

Each occurrence (each investigation)

July 2006

H10010 – BMS SUB – PATCH SPALLS BRIDGES

Production Unit: None

Purpose

Repair of spalls in substructure elements such as abutments, backwalls, wingwalls, piers, pier fenders, footings, columns, struts, caps; pile extensions, culverts, and tunnels. These spalls are typically 75 mm or less in depth.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H10011 – BMS SUB – REPLACE BRIDGES

Production Unit: None

Purpose

Replacement of substructure elements such as abutments, backwalls, wingwalls, piers, pier fenders, footings, columns, struts, caps, pile extensions, culverts, tunnels and other substructure elements not listed.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

**H10012 – BMS SUB – REHAB
BRIDGES****Production Unit:** None**Purpose**

Repair substructure elements such as abutments, backwalls, wingwalls, piers, pier fenders, footings, columns, struts, caps, pile extensions, culverts, tunnels, and other substructure elements not listed.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

**H10013 – BMS SUB – EPOXY INJECT
BRIDGES****Production Unit:** None**Purpose**

Inject epoxy into cracks on concrete substructure elements such as abutments, backwalls, wingwalls, piers, pier fenders, footings, columns, struts, caps, pile extensions, culverts, and tunnels.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H10021 – INSTALL GRAFITTI DETERENT BRIDGES

Production Unit: Each occurrence

Purpose

Install a graffiti deterrent system on bridge substructure elements such as abutments, backwalls, wingwalls, piers, pier fenders, footings, columns, struts, caps, pile extensions, culverts, tunnels, and other substructure elements not listed.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

Each occurrence

H10040 – BMS SUB-NAV – PROTECT BRIDGES

Production Unit: None

Purpose

Install or repair navigation protection on substructure elements in navigable waterways, such as abutments, piers, and columns. Substructure protection may consist of fenders, dolphins, and navigational lighting (etc.).

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H10050 – CLEAR DEBRIS/CHANNEL CLEANING BRIDGES

Production Unit: Each occurrence

Purpose

Insure proper flow of the waterway under the bridge structure. This Activity includes clearing or removing any debris that may be caught on a bridge substructure element. It is also to be used for cleaning the channel under the bridge of any debris that may inhibit water traveling under the bridge. Debris can be logs, tree and shrub branches, and man made products.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

**H10060 – BMS SUB – PAINT
BRIDGES****Production Unit:** None**Purpose**

Protect steel substructure elements such as abutments, backwalls, wingwalls, piers, pier fenders, footings, columns, struts, caps, pile extensions, culverts, tunnels, and other substructure elements not listed, by applying protective paint. This Activity also includes all pre-paint preparation such as blast cleaning and surface preparation.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

**H10070 – BIRD NETTING / EXCLUSION
BRIDGES****Production Unit:** Each occurrence**Purpose**

Deter birds from nesting on bridge substructure elements by installing bird netting. Substructure elements include abutments, backwalls, wingwalls, piers, pier fenders, footings, columns, struts, caps, pile extensions, culverts, tunnels, and other substructure elements not listed.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

Each occurrence

**H10090 – BMS SUB - MISC.
BRIDGES****Production Unit:** None**Purpose**

This Activity shall be used for any miscellaneous bridge substructure activity not captured by other substructure Activity Codes. Substructure elements include abutments, backwalls, wingwalls, piers, pier fenders, footings, columns, struts, caps, pile extensions, culverts, tunnels, and other substructure elements not listed.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H20010 – BMS SUPER – PATCH SPALLS BRIDGES

Production Unit: None

Purpose

Repair concrete spalls on bridge superstructure elements. Superstructure elements include girders, stringers, slabs, trusses, arches, floor beams, and other superstructure elements not listed. Spall patch preparation, including removing unsound concrete, surface cleaning, and application of bonding agents, shall also be included in this Activity.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H20011 – BMS SUPER – REPLACE BRIDGES

Production Unit: None

Purpose

Replace a portion or all of a bridge superstructure element. Superstructure elements include girders, stringers, slabs, trusses, arches, cables, floor beams, and other superstructure elements not listed.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H20012 – BMS SUPER – REHAB BRIDGES

Production Unit: None

Purpose

Repair or rehabilitate all or a portion of bridge superstructure elements. Superstructure elements include girders, stringers, slabs, trusses, arches, cables, floor beams, and other superstructure elements not listed.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H20013 – BMS SUPER – EPOXY INJECT BRIDGES

Production Unit: None

Purpose

Inject epoxy into cracks on concrete bridge superstructure elements. Superstructure elements include girders, stringers, slabs, trusses, arches, floor beams, and other superstructure elements not listed.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H20070 – REPLACE GATES – SUPER BRIDGES

Production Unit: Each occurrence

Purpose

This Activity is for the replacement of failed mechanical and electrical traffic gates that cannot be repaired, on all bridge structures, movable bridges, and toll bridges. The replacement of mechanical and electrical equipment is replacement in kind, to accomplish the same intended function. This work is typically resulting from an inspection report condition and recommendation, or from consultation with Division of Engineering Services, Mechanical and Electrical Engineers.

Special Requirements

All work shall be in conformance with Caltrans Safety Manual; California Administrative Code, Title 8 Industrial Relations, Chapter 4 Division of Industrial Safety; and Title 33 Code of Federal Regulations, US Coast Guard, Subchapter J, Part 117, Drawbridge Operation Regulations.

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

Each occurrence

July 2006

**H20090 – BMS SUPER - MISC.
BRIDGES****Production Unit:** None**Purpose**

This Activity Code shall be used to capture any maintenance or repair of bridge superstructure elements that have not been previously identified. Superstructure elements include girders, stringers, slabs, trusses, arches, floor beams, and other superstructure elements not listed.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H30011 – BMS DECK – REPLACE BRIDGES

Production Unit: None

Purpose

Perform a complete or partial replacement of a bridge deck. This can be a full depth replacement or a deck on deck replacement.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H30012 – BMS DECK – REHAB BRIDGES

Production Unit: None

Purpose

Perform a partial depth deck replacement on a portion or all of a bridge deck.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H30013 – BMS DECK – RESURFACE BRIDGES

Production Unit: None

Purpose

Resurface a portion or all of a bridge deck with either asphalt concrete or polyester concrete.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H30020 – BMS DECK - PATCH SPALLS BRIDGES

Production Unit: None

Purpose

Patch spalls in a bridge deck, up to 75 mm in depth.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H30030 – BMS DECK - REPAIR POTHOLE BRIDGES

Production Unit: None

Purpose

Patch potholes in a bridge deck, up to 150 mm in depth.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H30050 – BMS DECK – METHACRYLATE BRIDGES

Production Unit: None

Purpose

Treat a concrete bridge deck subjected to cracking with Methacrylate. This Activity also includes all associated work to prepare the deck surface for the application of Methacrylate.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H30060 – BMS DECK - PLACE OVERLAY BRIDGES

Production Unit: None

Purpose

Repair or rehabilitate a bridge deck by placing an overlay on a bridge deck. The overlay can be either asphalt concrete or polyester concrete. This Activity also includes all associated work to prepare the deck surface for the application of deck overlay.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H30070 – BMS DECK – REPAINT BRIDGES

Production Unit: None

Purpose

Protect steel deck elements. This Activity is used when repainting the deck of a steel bridge. This Activity includes steel deck surface preparation prior to painting.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

**H30090 – BMS DECK - MISC.
BRIDGES****Production Unit:** None**Purpose**

To capture any maintenance or repair of a bridge deck that is not specifically captured by another Activity.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H31011 – BMS APPROACH SLAB – REPLACE BRIDGES

Production Unit: None

Purpose

Perform a complete or partial replacement of a bridge approach slab.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H31080– BMS APPROACH SLAB – MUDJACK BRIDGES

Production Unit: None

Purpose

Level an approach slab that has settled due to the development of voids or approach fill settlement under the slab. The approach slab will be raised to level with the aid of mudjacking techniques.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H40010 – BMS JOINTS – REPAIR/ CLEAN BRIDGES

Production Unit: None

Purpose

Repair portions of damaged or deteriorated bridge deck joints or bridge joint seals and/or clean impacted dirt and debris from deck joint. This Activity is typically associated with open or sealed joints with a movement rating up to 50 mm. Sealed joints may include strip seals, pourable seals, and compression seals.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H40011 – BMS JOINTS – REPLACE BRIDGES

Production Unit: None

Purpose

Replace damaged or deteriorated bridge deck joints or joint seals. This Activity is typically associated with open or sealed joints with a movement rating up to 50 mm. Sealed joints may include strip seals, pourable seals and compression seals.

This Activity also includes joint or joint seal removal and joint preparation.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H40012 – BMS JOINTS – REHAB BRIDGES

Production Unit: None

Purpose

Rehabilitate existing bridge deck joints or joint seals. This Activity will likely apply to joints with large movement ratings and large joint seal assemblies of varying materials.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H41012 – BMS BEARINGS – REHAB BRIDGES

Production Unit: None

Purpose

Rehabilitate damaged or deteriorated bearings. This would include repairs or modifications to existing bearings. It may be necessary to jack the bridge to unload the bearing.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H41050 – BMS BEARINGS – CLEAN BRIDGES

Production Unit: None

Purpose

Clean the dirt and debris from bridge bearings and surrounding area. This will insure proper movement and prevent deterioration of the bearing.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H50010 – BMS RAILING – REPAIR BRIDGES

Production Unit: None

Purpose

Repair damaged or deteriorated bridge rail. Repairs are typically made to the rail parapet.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H50011 – BMS RAILING – REPLACE BRIDGES

Production Unit: None

Purpose

Replace existing deteriorated, damaged or inadequate bridge rail with new bridge rail. This Activity will also include removal of existing rail.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H50012 – BMS RAILING – REHAB BRIDGES

Production Unit: None

Purpose

Rehabilitate portions or all of existing bridge rail due to damage, deterioration, or inadequacies. This Activity will also include removal of rail portion to be rehabilitated.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H50060 – BMS RAILING – PAINT BRIDGES

Production Unit: None

Purpose

Protect steel bridge rail elements by applying protective coats of paint.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H60050 – CLEAN PAN, GUTTER, DRAINAGE SYS BRIDGES

Production Unit: None

Purpose

Clean the pan, gutter, and drainage system to insure proper drainage of bridge deck.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H70060 – RIGGING CONTAINMENT – PAINT BRIDGES

Production Unit: None

Purpose

Install a containment system for steel bridges suitable for containing all water, resulting debris, and visible dust when the existing paint system is disturbed during surface preparation operations. Containment systems can also be used to contain overspray during spray application of new coatings.

Special Requirements

Containment system must meet Caltrans' "containment system" requirements. Cal/OSHA requirements also must be met if the existing paint system contains hazardous materials and is disturbed during the installation.

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the "H" Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H70061 – SPOT REMOVAL & SPOT PAINT BRIDGES

Production Unit: Square feet

Purpose

Perform localized protective paint coating damage repairs on steel bridges. This Activity is suitable for structures with localized damage due to harsh environmental factors, fire, traffic impact, deck joint failure, etc. Spot removal and spot paint refer to a small portion of the structure where other areas on the bridge are in good condition and do not warrant repairs. Painted steel elements with localized damage are primarily in Condition State 4 or 5.

- Condition State 4: The paint system has failed. Surface pitting may be present, but any section loss due to active corrosion does not yet warrant structural analysis of either the element or the bridge.
- Condition State 5: Corrosion has caused section loss and is sufficient to warrant structural analysis to ascertain the impact on the ultimate strength and/or serviceability of either the element or the bridge.

Special Requirements

All work must comply with Caltrans' debris containment and debris handling requirements. Also, work must be performed in accordance with Cal/OSHA's lead in construction requirements found in Title 8, Section 1532.1 "Lead" of the California Code of Regulations (Cal/OSHA's website is www.dir.ca.gov/dosh).

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the "H" Family Activity Instructions for more information.

Production Unit Calculation

Square feet

July 2006

H70062 – SPOT REMOVAL & FULL PAINT BRIDGES

Production Unit: Square feet

Purpose

Perform protective paint coating damage repairs on steel bridges, which require localized hand or power tool cleaning down to bare metal. This Activity is suitable for steel bridges with heavy localized rust and moderate paint system distress on all other sections of the bridge. Painted steel elements with localized rust are primarily in Condition States 4 or 5, with the remaining portions of the steel painted elements primarily in Condition State 3.

- Condition State 3: Surface or freckled rust has formed or is forming. The paint system is no longer effective. There may be exposed metal but there is no active corrosion, which is causing loss of section.
- Condition State 4: The paint system has failed. Surface pitting may be present, but any section loss due to active corrosion does not yet warrant structural analysis of either the element or the bridge.
- Condition State 5: Corrosion has caused section loss and is sufficient to warrant structural analysis to ascertain the impact on the ultimate strength and/or serviceability of either the element or the bridge.

Special Requirements

All work must comply with Caltrans' debris containment and debris handling requirements. Also, work must be performed in accordance with Cal/OSHA's lead in construction requirements found in Title 8, Section 1532.1 "Lead" of the California Code of Regulations (Cal/OSHA's website is www.dir.ca.gov/dosh).

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the "H" Family Activity Instructions for more information.

Production Unit Calculation

Square feet

July 2006

H70063 – FULL REMOVAL & FULL PAINT BRIDGES

Production Unit: Square feet

Purpose

Perform protective paint coating damage repairs on steel structures that require 100% removal of the existing paint system. This Activity is suitable for bridges where the paint system has failed and rust is prevalent and distributed over more than 20% of the bridge. Painted steel elements are primarily in Condition State 4 or 5.

- Condition State 4: The paint system has failed. Surface pitting may be present, but any section loss due to active corrosion does not yet warrant structural analysis of either the element or the bridge.
- Condition State 5: Corrosion has caused section loss and is sufficient to warrant structural analysis to ascertain the impact on the ultimate strength and/or serviceability of either the element or the bridge.

Special Requirements

All work must comply with Caltrans' debris containment and debris handling requirements. Also, work must be performed in accordance with Cal/OSHA's lead in construction requirements found in Title 8, Section 1532.1 "Lead" of the California Code of Regulations (Cal/OSHA's website is www.dir.ca.gov/dosh).

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the "H" Family Activity Instructions for more information.

Production Unit Calculation

Square feet

July 2006

H70069 – OTHER PAINT ACTIVITIES BRIDGES

Production Unit: None

Purpose

This Activity covers any bridge painting support activities not addressed in Activities H70060, H70061, H70062 and H70063.

Use this Activity when refreshing Bridge Numbers by re-stenciling. Re-stenciling of bridge Numbers can be charged to the Roadway. You must charge the work to the route that work is performed on.

Special Requirements

None

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H80010 – BMS MECH/ELECTRICAL – REPAIR BRIDGES

Production Unit: None

Purpose

This Activity is for all repairs, and repairs resulting from an inspection report condition and recommendation to existing mechanical and electrical equipment on all bridge structures, movable bridges, and toll bridge air and water systems.

Special Requirements

All work shall be in conformance with Caltrans Safety Manual, California Administrative Code, Title 8 Industrial Relations, Chapter 4 Division of Industrial Safety, Title 33 Code of Federal Regulations, and US Coast Guard, Subchapter J, Part 117, Drawbridge Operation Regulations.

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H80011 – BMS MECH/ELECTRICAL – REPLACE BRIDGES

Production Unit: None

Purpose

This Activity is for the replacement of failed mechanical and electrical equipment that cannot be repaired on all bridge structures, movable bridges, and toll bridge air and water systems. The replacement of mechanical and electrical equipment is replacement in kind, to accomplish the same intended function. This work is typically resulting from an inspection report condition and recommendation, or from consultation with Division of Engineering Services, Mechanical and Electrical Engineers.

Special Requirements

All work shall be in conformance with Caltrans Safety Manual; California Administrative Code, Title 8 Industrial Relations, Chapter 4 Division of Industrial Safety; and Title 33 Code of Federal Regulations, US Coast Guard, Subchapter J, Part 117, Drawbridge Operation Regulations.

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H80012 – BMS MECH/ELECTRICAL – REHAB BRIDGES

Production Unit: None

Purpose

This Activity is for the rehabilitation of failed mechanical and electrical equipment that cannot be replaced, or upgrading of existing systems to current design standards, or the addition of new equipment or systems on all bridge structures, movable bridges, and toll bridge air and water systems. The replacement of mechanical and electrical equipment is replacement to accomplish the similar intended function. This work results from an inspection report condition and recommendation, or from consultation with Division of Engineering Services, Mechanical and Electrical Engineers.

Special Requirements

All work shall be in conformance with Caltrans Safety Manual; California Administrative Code, Title 8 Industrial Relations, Chapter 4 Division of Industrial Safety; and Title 33 Code of Federal Regulations, US Coast Guard, Subchapter J, Part 117, Drawbridge Operation Regulations.

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H80090 – BMS MECH/ELECTRICAL - MISC. BRIDGES

Production Unit: None

Purpose

This Activity is intended to cover all scheduled preventative and routine maintenance of mechanical and electrical equipment, which is operating normally, and existing mechanical and electrical equipment on all bridge structures, movable bridges, and toll bridge air and water systems. This includes general cleaning, house maintenance, lubrication, adjusting equipment for optimal operation, electrical adjustments to movable bridge operations and controls, and normal electrical maintenance.

Special Requirements

All work shall be in conformance with Caltrans Safety Manual; California Administrative Code, Title 8 Industrial Relations, Chapter 4 Division of Industrial Safety; and Title 33 Code of Federal Regulations, US Coast Guard, Subchapter J, Part 117, Drawbridge Operation Regulations.

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H90011 – BMS BRIDGE – REPLACE BRIDGES

Production Unit: None

Purpose

This Activity is for all required support of the replacement highway bridges. This may include emergency response and support of contractor activities, special inspections required prior to or during contract work, or any other work needs to support this Activity.

This Activity may also be for the replacement of failed structural component that cannot be repaired on any bridge structure or movable bridge. The replacement of structural components is replacement in kind, to accomplish the same intended function.

This work is typically resulting from an inspection report condition and recommendation, or from consultation with the Division of Maintenance, Structure Maintenance and Investigations Engineers. This Activity may require working with ES Engineering staff, Contractor's staff, and HQ Structure Maintenance staff.

Special Requirements

See "Purpose" above.

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the "H" Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

H91010 – BMS SEISMIC – MAINTENANCE BRIDGES

Production Unit: None

Purpose

This Activity is intended to cover all scheduled preventative and routine maintenance on bridge seismic elements. This shall include earthquake restrainers, pipeseat extenders, catcher blocks, shear keys, column shells, dampening and bearing systems, infill walls, seismic instruments, or any other seismic related maintenance.

Special Requirements

None

Note: A specific Subjob is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

H91040 – BMS SEISMIC – RETROFIT BRIDGES

Production Unit: None

Purpose

This Activity is intended to cover all work on installation of or updating of bridge seismic retrofit elements. This shall include earthquake restrainers, pipeseat extenders, catcher blocks, shear keys, column shells, dampening and bearing systems, infill walls, seismic instruments, or any other future seismic retrofit items.

Special Requirements

None

Production Unit Calculation

None

July 2006

H92080 – DRAWBRIDGE OPERATION & MAINTENANCE BRIDGES

Production Unit: None

Purpose

This Activity is for movable bridge (also known as “drawbridge”) evaluation of operations and maintenance, which are required for the overall performance of the movable bridge. This can include bridge operator facilities, enhancements not specifically classified as repairs, electrical operation and control evaluations, general condition evaluation of operations, and other mechanical, electrical, or structural non-repair activities that do not fit elsewhere. This Activity can include structural inspection evaluations. This Activity will usually result in a follow-up inspection by Division of Engineering Services, Mechanical and Electrical Engineers, which generates conditions and recommendations for repair or rehabilitation.

Special Requirements

All work shall be in conformance with Caltrans Safety Manual; California Administrative Code, Title 8 Industrial Relations, Chapter 4 Division of Industrial Safety; and Title 33 Code of Federal Regulations, US Coast Guard, Subchapter J, Part 117, Drawbridge Operation Regulations.

Note: A specific Subjob and Expenditure Authorization is required for all Maintenance work performed on a toll bridge span or approach. See special instructions on the last page of the “H” Family Activity Instructions for more information.

Production Unit Calculation

None

July 2006

A valid Subjob and BATA Expenditure Authorization must be used for all Maintenance work performed on a toll bridge or approach including call boxes.

**TOLL BRIDGE SPAN AND APPROACH
(Including call box repairs)**

IMMS	ASSET NAME	ASSET TYPE	SUBJOB	EA
	Antioch	BRIDGE	3T93A	
	Benicia - Martinez	BRIDGE	3T98A	Contact your
	Carquinez	BRIDGE	3T97A	District
	Richmond - San Rafael	BRIDGE	3T91A	IMMS
	Dumbarton	BRIDGE	3T96A	Coordinator to
	San Mateo - Hayward	BRIDGE	3T95A	obtain
	SFOBB	BRIDGE	3T94A	appropriate BATA EA

Do not use these Subjobs and BATA EA for work performed:

- at toll booths and toll collection facilities
- for toll collection equipment
- at Transbay Terminal Building
- at toll plazas
- on Automatic Toll Collection Accounting System (ATCAS)

These work activities are reported to the “J Family.” See “J” Family Activity Instructions for proper coding requirements.

Maintenance Manual Volume Two
Activity Instructions

J Family

Introduction

There are numerous Expenditure Authorization combinations associated with work performed by Maintenance forces on toll bridges and toll collection facilities. It is important that Maintenance Supervisors are familiar with the coding requirements associated with each Activity and complete Work Orders accordingly.

Failure to include appropriate coding including Expenditure Authorizations and Subjobs can in some cases result in the Maintenance Division not being reimbursed; subsequently losing valuable funds.

Charging against Expenditure Authorizations and Subjobs when not appropriate can have equal ramifications because we are charging others for work that is not authorized.

When reporting to any Family, improper charging can result in the Maintenance Supervisor being required to make Work Order corrections. Therefore, it is important to read and be familiar with the various coding associated with each work activity, and insure the proper IMMS Activity and all other required coding is included when the Work Order for each job is created.

To assist Maintenance Supervisors and managers in selecting the right coding for the job, a list of the coding requirements for toll bridges has been included at the beginning of the J Family, and included again with each Activity as applicable. *Note that there are some cases when toll bridge work is recorded to Families other than the J Family.*

Always review the individual Activity Instructions to insure you have selected the appropriate Activity for the job, and to insure you follow all special reporting requirements.

The coding instructions included here may not account for all special coding requirements that may exist or arise within your district. Contact your District IMMS Coordinator with any questions you may have.

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT Subjobs and Expenditure Authorizations are intended **only** for maintenance work directly related to toll collection operation at toll booths. Work activities include toll booth lighting, electrical, fans, doors, windows, attenuators, toll collector equipment, overhangs, canopies, and lane scrubbing.

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
Antioch		APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
Benicia - Martinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
Carquinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
Richmond - San Rafael		APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
Dumbarton		APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
San Mateo - Hayward		APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
SFOBB		APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B

MAINTENANCE AND REPAIR OF TOLL PLAZA BUILDING Expenditure Authorizations are intended to be used only for maintenance and repair of the toll plaza **building and grounds**. Work activities include lighting, electrical, plumbing, painting, sewer, parking lot, fence, pest control, and mitigation of pigeon problems.

MAINTENANCE AND REPAIR OF TOLL PLAZA BUILDING					
	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
Antioch	APP(TOLL)	J7xxxx	N/A	970305	N/A
Benicia - Martinez	APP(TOLL)	J7xxxx	N/A	970805	N/A
Carquinez	APP(TOLL)	J7xxxx	N/A	970705	N/A
Richmond - San Rafael	APP(TOLL)	J7xxxx	N/A	970105	N/A
Dumbarton	APP(TOLL)	J7xxxx	N/A	970605	N/A
San Mateo - Hayward	APP(TOLL)	J7xxxx	N/A	970505	N/A
SFOBB	APP(TOLL)	J7xxxx	N/A	970405	N/A

TOW TRUCK OPERATIONS on toll bridges require the use of Subjob per list below. These Subjobs are to be used for **Tow Service operations** only.

TOW TRUCK OPERATIONS

IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	BRIDGE	J50000	N/A	N/A	3T93C
	Benicia - Martinez	BRIDGE	J50000	N/A	N/A	3T98C
	Carquinez	BRIDGE	J50000	N/A	N/A	3T97C
	Richmond - San Rafael	BRIDGE	J50000	N/A	N/A	3T91C
	Dumbarton	BRIDGE	J50000	N/A	N/A	3T96C
	San Mateo - Hayward	BRIDGE	J50000	N/A	N/A	3T95C
	SFOBB	BRIDGE	J50000	N/A	N/A	3T94C

TRANSBAY TERMINAL BUILDING Subjob and Expenditure Authorization is intended to be used **only** for maintenance and repairs to the SFOBB Terminal Building including painting, graffiti removal, lighting, and electrical.

TRANSBAY TERMINAL BUILDING

IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Transbay Terminal	APP (TTT)	J4xxxx	N/A	926857	3T89B

AUTOMATIC TOLL COLLECTION ACCOUNTING SYSTEM (ATCAS) Subjobs and Expenditure Authorizations are intended to be used only for maintenance of the **ATCAS system** including electrical, cameras, light curtains, and computer lines.

AUTOMATIC TOLL COLLECTION ACCOUNTING SYSTEM (ATCAS)

IMMS	ASSET NAME	ASSET TYPE	Activity	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP(TOLL)	J7xxxx	MATCAS	926851	3T93B
	Benicia -Martinez	APP(TOLL)	J7xxxx	MATCAS	926852	3T98B
	Carquinez	APP(TOLL)	J7xxxx	MATCAS	926853	3T97B
	Richmond - San Rafael	APP(TOLL)	J7xxxx	MATCAS	926854	3T91B
	Dumbarton	APP(TOLL)	J7xxxx	MATCAS	926855	3T96B
	San Mateo - Hayward	APP(TOLL)	J7xxxx	MATCAS	926856	3T95B
	SFOBB	APP(TOLL)	J7xxxx	MATCAS	926857	3T94B

TOLL BRIDGE SPAN AND APPROACH includes all maintenance work performed on a toll bridge or approach **which cannot be associated with other Subjobs and/or Expenditure Authorizations**. All maintenance work that does not require other Expenditure Authorization and/or Subjob must include the Subjobs listed below on the Work Order.

This Subjob must be used with the appropriate Family. For example, H Family (structural maintenance). It is essential to account for all the work that is performed, so that the Maintenance Division can substantiate the amount of resources that are expended to protect the investments made on these bridges, and justify our resource needs for the future.

CALL BOX REPAIRS MUST BE CHARGED TO THESE SUBJOBS WITH ACTIVITY H80010.

**TOLL BRIDGE SPAN AND APPROACH (All
other Maintenance)
(INCLUDING CALL BOX REPAIRS)**

IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	BRIDGE	VARIOUS	N/A	N/A	3T93A
	Benicia - Martinez	BRIDGE	VARIOUS	N/A	N/A	3T98A
	Carquinez	BRIDGE	VARIOUS	N/A	N/A	3T97A
	Richmond - San Rafael	BRIDGE	VARIOUS	N/A	N/A	3T91A
	Dumbarton	BRIDGE	VARIOUS	N/A	N/A	3T96A
	San Mateo - Hayward	BRIDGE	VARIOUS	N/A	N/A	3T95A
	SFOBB	BRIDGE	VARIOUS	N/A	N/A	3T94A

PUMPING PLANT ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
J10001	INSPECTION	EA	Each	BR
J10002	COMPLAINT INVESTIGATION	EAOC	Each Occurrence	BR
J10003	PM CHECK	EAOC	Each Occurrence	BR,RW
J10004	CONFINED SPACE TESTING	EA	Each	BR
J10005	GENERAL	EA	Each	BR,RW
J10009	UNDERGROUND SERVICE ALERT	EAOC	Each Occurrence	BR
J10010	REPAIR/REPLACE	EA	Each	BR
J10040	MODIFY - DAY LABOR	EA	Each	BR
J10050	CLEAN	EA	Each	BR

TUNNELS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
J20001	GENERAL INSPECTION	EAOC	Each Occurrence	BR
J20002	COMPLAINT INVESTIGATION	EAOC	Each Occurrence	BR
J20003	CONFINED SPACE TESTING	EAOC	Each Occurrence	BR
J20004	CHECK FIRE EXTINGUISHER	EAOC	Each Occurrence	BR
J20005	DISPATCH -CONTROL RM - RADIO	NONE	None	BR
J20006	CONTROL ROOM/RADIO REPAIR	EAOC	Each Occurrence	BR
J20009	UNDERGROUND SERVICE ALERT	EAOC	Each Occurrence	BR
J20010	REPAIR/REPLACE PARTS	EAOC	Each Occurrence	BR
J20012	ELECTRICAL MOTOR MAINTENANCE	EAOC	Each Occurrence	BR
J20041	MAINTAIN BLOWERS	EAOC	Each Occurrence	BR
J20042	MAINTAIN EXHAUSTERS	EAOC	Each Occurrence	BR
J20043	GREASE ROLLERS - BARRIER PITS	EAOC	Each Occurrence	BR
J20044	MAINTAIN AIR COMPRESSORS	EAOC	Each Occurrence	BR
J20045	ZERO/SPAN NO/CO ANALYZERS	EA	Each	BR
J20046	SERVICE COOLING - EMERG GENRTR	EAOC	Each Occurrence	BR
J20047	MAINTAIN EMERGENCY DIESEL	EAOC	Each Occurrence	BR
J20050	WASH	SQFT	Square Feet	BR
J20051	CLEAN DRAINS	EAOC	Each Occurrence	BR
J20060	RELAMP	EAOC	Each Occurrence	BR

FERRYBOATS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
J30001	INSPECTIONS	EAOC	Each Occurrence	BR
J30002	COMPLAINT INVESTIGATION	EAOC	Each Occurrence	BR
J30010	MAINTENANCE & REPAIR	EA	Each	BR
J30080	OPERATIONS	TRIP	Trip	BR

SFOBB TERMINAL ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
J40001	INSPECTION TRANSBAY TERM	EAOC	Each Occurrence	APP
J40002	TRANSBAY TERM COMPLAINT INVESTIGATION	EAOC	Each Occurrence	APP
J40003	TRANSBAY TERM PM CHECK	EA	EACH	
J40009	TRANSBAY TERM USA	EAOC	Each Occurrence	APP
J40010	TRANSBAY TERM FACILITY REPAIR	EAOC	Each Occurrence	APP
J40011	TRANSBAY TERM ELECTRICAL REPAIR	EAOC	Each Occurrence	APP
J40012	TRANSBAY TRANSIT TERM GROUND MAINTENANCE	NONE	None	APP,FAC
J40020	TRANSBAY TERM DAY LABOR	EACH	Each Occurrence	APP
J40050	TRANSBAY TRANSIT TERM JANITORIAL	HR	Hours	APP

TOW SERVICES AND BICYCLE SHUTTLE

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
J50000	TOW TRUCK OPERATION	HR	Hours	BR,RW
J50100	BICYCLE SHUTTLE TOLL BRIDGES	EA	Each	BR

CHANNELIZERS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
J60001	INSPECTION	VEMI	Vehicle Miles	BR,RW
J60002	COMPLAINT INVESTIGATION	EAOC	Each Occurrence	BR,RW
J60003	NIGHT INSPECT	VEMI	Vehicle Miles	BR,RW
J60009	UNDERGROUND SERVICE ALERT	EAOC	Each Occurrence	BR,RW
J60010	REPAIR/REPLACE	EA	Each	BR,RW
J60020	DAY LABOR	EA	Each	BR,RW
J60050	SCHEDULED LANE CHANGE.	EAOC	Each Occurrence	BR,RW

TOLL PLAZAS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
J70001	INSPECTION	EAOC	Each Occurrence	APP
J70002	COMPLAINT INVESTIGATION	EAOC	Each Occurrence	APP
J70003	PM CHECK	EA	Each	APP
J70009	UNDERGROUND SERVICE ALERT	EAOC	Each Occurrence	APP
J70010	FACILITY REPAIRS	EAOC	Each Occurrence	APP
J70011	ELECTRICAL REPAIR	EAOC	Each Occurrence	APP
J70013	BOOTH AND CANOPY MAINT	NONE	None	APP
J70020	REIMBURSED WORK (DAY LABOR)	EAOC	Each Occurrence	APP
J70050	LANE SCRUBBING	EA	Each	APP
J70060	PAINTING	SQFT	Square Feet	APP

CALIBRATE/REPAIR TEST EQUIPMENT

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
J90110	CALIBRATE/REPAIR TEST EQUIP	EA	Each	FAC

J10001 – INSPECTION PUMPING PLANT

Production Unit: Each

Purpose

This Activity covers general inspection of mechanical and electrical equipment at all roadway drainage pumping plants and support activities for annual inspections, and routine inspections at all roadway stormwater pumping plants. Support activities include; assisting Division of Engineering Services Mechanical and Electrical Engineers during their inspections by providing access, historical records, labor support for moving equipment during inspection, inspection tools, and for operating equipment during inspections.

Do not use for structural inspections.

Special Requirements

None

Production Unit Calculation

Each inspection

J10002 – COMPLAINT INVESTIGATION PUMPING PLANT

Production Unit: Each occurrence

Purpose

This Activity covers complaint investigation of mechanical and electrical equipment at all roadway drainage pumping plants. These complaints usually result from an equipment failure that renders the pumping plant inoperable. Response to these complaints is normally considered an emergency. This Activity also includes support activities for emergency follow-up inspections by Division of Engineering Services, Mechanical and Electrical Engineers that result from the initial complaint investigation. Support activities include assisting Mechanical and Electrical Engineers during their investigation by providing access, historical records, labor support for moving equipment during inspection, inspection tools, and for operating equipment during investigation. This Activity is not intended for complaint inspections involving structural features.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

None

Production Unit Calculation

Each complaint investigated

J10003 – PM CHECK PUMPING PLANT

Production Unit: Each occurrence

Purpose

This Activity is for routine or scheduled preventative maintenance inspections of mechanical and electrical equipment of roadway drainage pumping plants to assure normal operation prior to start of rainfall season or forecasted weather. Visual inspection for unobstructed drainage inlets, storage box entrance bays and pump sumps, and outfall piping or drainage canals. Hand operation of automatic control panel settings, momentary pump operation, and proper operation of electrical features such as lights and ventilation.

Do not use for general maintenance or repairs to pumping plants (see J10005 or J10010).

Special Requirements

None

Production Unit Calculation

Each occurrence

J10004 – CONFINED SPACE TESTING PUMPING PLANT

Production Unit: Each occurrence

Purpose

Perform confined space air quality testing to assure a safe working environment and all preliminary entry procedures. Confined space testing shall be performed prior to the work area being occupied. Any activity making the work area safe for occupancy shall be included in this work activity.

Special Requirements

None

Production Unit Calculation

Each occurrence

J10004 – PM CHECK PUMPING PLANT

Production Unit: Each occurrence

Purpose

This Activity is for routine or scheduled preventative maintenance inspections of mechanical and electrical equipment of roadway drainage pumping plants to assure normal operation prior to start of rainfall season or forecasted weather. Visual inspection for unobstructed drainage inlets, storage box entrance bays and pump sumps, and outfall piping or drainage canals. Hand operation of automatic control panel settings, momentary pump operation, and proper operation of electrical features such as lights and ventilation.

Do not use for general maintenance or repairs to pumping plants (see J10005 or J10010).

Special Requirements

None

Production Unit Calculation

Each occurrence

J10005 – GENERAL OPERATIONS/MAINTENANCE PUMPING PLANT

Production Unit: Each

Purpose

Perform general maintenance of pumping plants at regularly scheduled intervals according to preventative maintenance schedules. This includes maintaining and servicing the mechanical and electrical equipment to a clean and serviceable condition. This work includes lubrication and adjustments of pump and rotating equipment, and servicing electrical components, PLC controls and water level indicating devices. In addition, the plants pumping operations shall be tested at regular intervals to assure that the pumping equipment is in proper operating condition.

Do not use for:

- Scheduled PM checks (see J10004).
- Repairs (see J10010).

Special Requirements

None

Production Unit Calculation

Each

J10009 – UNDERGROUND SERVICE ALERT PUMPING PLANT

Production Unit: Each occurrence

Purpose

Prior to any underground digging or excavations commence, in or near any pumping plants, the area shall be checked to determine if there are any buried utilities. The Superintendent or supervisor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing any excavation with power tools. If the excavation will be conducted in an area which is known, or reasonably should be known, to contain Caltrans electrical facilities, the Superintendent or supervisor shall notify the Electrical Supervisor for the area, prior to commencing any excavation.

Special Requirements

None

Production Unit Calculation: Each occurrence

J10010 – REPAIR/REPLACE PUMPING PLANT

Production Unit: Each

Purpose

Repair or replace damaged or inadequate equipment pertaining to pumping plant operations. This would include mechanical equipment, electrical controls, or any pumping plant structural components needed to maintain the pumping plant in serviceable condition.

Repairs resulting from an inspection report condition and recommendation to existing mechanical and electrical equipment on all pumping plants.

Replacement of failed existing mechanical and electrical equipment that cannot be repaired, on all pumping plants. The replacement of mechanical and electrical equipment is replacement in kind, to accomplish the same intended function. This work is typically resulting from an inspection report condition and recommendation, or from consultation with Division of Engineering Services, Mechanical and Electrical Engineers.

Special Requirements

None

Production Unit Calculation

Each

J10040 – MODIFY DAY LABOR PUMPING PLANT

Production Unit: Each

Purpose

Perform modifications to existing mechanical equipment, electrical controls or structural components within the pumping plant to assure proper operating condition.

Rehabilitation of failed mechanical and electrical equipment that cannot be replaced, upgrading of existing systems to current design standards, or the addition of new equipment or systems at all pumping plants. This work is intended for Day Labor by State forces and not by a contractor. The replacement of mechanical and electrical equipment is replacement to accomplish the similar intended function. This work results from an inspection report condition and recommendation, or from consultation with Division of Engineering Services, Mechanical and Electrical Engineers.

Special Requirements

None

Production Unit Calculation

Each

J10050 – CLEAN PUMPING PLANT

Production Unit: Each

Purpose

This Activity is for the work required to clean the accumulated and excessive sand and debris from drainage inlets, drainage collection pipes, storage boxes, storage box entrance bays and pump sumps, outfall piping, drainage canals, and distribution structures. These structures and facilities must be cleaned to assure free flow of water to and from the pumping equipment.

Special Requirements

None

Production Unit Calculation

Each

J20001 – GENERAL INSPECTION TUNNELS

Production Unit: Each occurrence

Purpose

This Activity covers general inspection of structural, mechanical and electrical equipment at all roadway tunnels and tubes. This Activity covers support activities for annual inspections and routine inspections at all tunnels and tubes. Support activities include assisting ABME, and Division of Engineering Services, Mechanical and Electrical Engineers during their inspections by providing access, historical records, labor support for moving equipment during inspection, inspection tools, and for operating equipment during inspections.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20002 – COMPLAINT INVESTIGATION TUNNELS

Production Unit: Each occurrence

Purpose

This Activity covers complaint investigation of structural, mechanical and electrical equipment at all roadway tunnels and tubes. This inspection is usually considered an emergency and results from an equipment failure that renders the tunnel or tube inoperable. This Activity also includes support activities for emergency follow-up inspections by ABME or Division of Engineering Services, Mechanical and Electrical Engineers that result from the initial complaint investigation. Support activities include assisting Mechanical and Electrical Engineers during their investigations by providing access, historical records, labor support for moving equipment during inspection, inspection tools, and for operating equipment during investigations.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

None

Production Unit Calculation: Each occurrence

J20003 – CONFINED SPACE TESTING TUNNELS AND TUBES

Production Unit: Each occurrence

Purpose

Perform confined space air quality testing to assure a safe working environment and all preliminary entry procedures. Confined space testing shall be performed prior to the work area being occupied. Any activity making the work area safe for occupancy shall be included in this work activity.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20004 – CHECK FIRE EXTINGUISHER TUNNELS

Production Unit: Each occurrence

Purpose

This Activity includes general inspection, servicing, and testing of the various fire extinguishers in tunnels and tubes.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20005 – DISPATCH - CONTROL ROOM - RADIO TUNNELS

Production Unit: None

Purpose

This Activity includes day to day control room operations including operation of the various controls and radio equipment, intercom, monitors, displays, panels, and master control centers; PLC, SCADA, control programs, and sensors.

Caldecott Tunnel : This Activity is used for console person and duties include:

- Answer phones.
- Operate the radio.
- File paperwork.
- Serves as the backup for the Dist 4 headquarters.
- Communication Center during some weekends, holidays.

Do not use for maintenance and repair of Operations Control Room equipment (see J20006).

Special Requirements

None

Production Unit Calculation

None

J20006 – CONTROL ROOM / RADIO REPAIR TUNNELS

Production Unit: Each occurrence

Purpose

This Activity includes the inspection, servicing, and testing of the various controls and radio equipment required for tunnel and tube operation. Equipment includes radio, intercom, antenna and repeater stations, control monitors, displays, panels, master control centers, PLC, SCADA, control programs, and sensors. This Activity is intended for maintenance and not for the normal operation of this equipment.

Do not use for Control Room/dispatch “Operations” (see J20005).

Special Requirements

None

Production Unit Calculation

Each occurrence

J20009 – UNDERGROUND SERVICE ALERT TUNNELS

Production Unit: Each occurrence

Purpose

Prior to any underground digging or excavations commence, in or near any tunnels, the area shall be checked to determine if there are any buried utilities. The Superintendent or supervisor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing any excavation with power tools. If the excavation will be conducted in an area which is known, or reasonably should be known, to contain Caltrans electrical facilities, the Superintendent or supervisor shall notify the Electrical Supervisor for the area, prior to commencing any excavation.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20010 – REPAIR/REPLACE PARTS TUNNELS

Production Unit: Each occurrence

Purpose

Repair or replace damaged or inadequate equipment pertaining to tunnels, tubes, and their operations not listed elsewhere. This would include mechanical equipment; electrical controls or any structural components needed to maintain the tunnel and tubes in serviceable condition. This Activity is not intended for general maintenance activities.

All repairs resulting from an inspection report condition and recommendation to existing mechanical and electrical equipment in the tunnels or tubes.

Replacement of failed existing mechanical and electrical equipment that cannot be repaired at all tunnels and tubes. The replacement of mechanical and electrical equipment is replacement in kind to accomplish the same intended function. This work is typically resulting from an inspection report condition and recommendation, or from consultation with Division of Engineering Services, Mechanical and Electrical Engineers.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20012 – ELECTRICAL MOTOR MAINTENANCE TUNNELS

Production Unit: Each occurrence

Purpose

This Activity includes the general maintenance, scheduled preventative maintenance, and monitoring and testing required for the various electrical motors in tunnels and tubes. Work activities include the taking and logging of insulation and current readings, lubrication, adjustments, and cleaning of electrical motors.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20041 – MAINTAIN BLOWERS TUNNELS

Production Unit: Each occurrence

Purpose

This Activity includes the general maintenance, scheduled preventative maintenance, and monitoring and testing required for the various fresh air blowers and jet fans in tunnels and tubes. Work activities include the lubrication, adjustments, and cleaning of blower shafts, bearings, fan blades, safety guards, operational limit switches and interlocks, and duct louvers and dampers.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20042 – MAINTAIN EXHAUSTERS TUNNELS

Production Unit: Each occurrence

Purpose

This Activity includes the general maintenance, scheduled preventative maintenance, and monitoring and testing required for the various exhaust air exhausters and fans in tunnels and tubes. Work activities include the lubrication, adjustments, and cleaning of exhauster shafts, bearings, fan blades, safety guards, operational limit switches and interlocks, and duct louvers and dampers.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20043 – GREASE ROLLERS - BARRIER PITS TUNNELS

Production Unit: Each occurrence

Purpose

This Activity includes the general maintenance, scheduled preventative maintenance, and monitoring and testing required for the various mechanical barrier fences, movable barriers, and pop-up traffic control devices in the barrier pits at tunnels and tubes. Includes the lubrication, adjustments, and cleaning of shafts, bearings, posts, fences, drums, counterweights, safety guards, operational limit switches and interlocks, and hydraulic and pneumatic actuators.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20044 – MAINTAIN AIR COMPRESSORS TUNNELS

Production Unit: Each occurrence

Purpose

This Activity includes the general maintenance, scheduled preventative maintenance, and monitoring and testing required for the various air compressors in tunnels and tubes. Includes the lubrication, adjustments, and cleaning of shafts, bearings, fan blades, safety guards, operational limit switches and interlocks, and pneumatic control valves and piping.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20045 – ZERO/SPAN NO/CO ANALYZERS TUNNELS

Production Unit: Each

Purpose

This Activity includes the general maintenance, scheduled preventative maintenance, and monitoring and testing required for the various zero and span NO and CO analyzers and related sensors in tunnels and tubes. Includes the down loading of data and data loggers, calibration, lubrication, and adjustments and cleaning of safety guards, operational limit switches and interlocks, and sensor elements.

Special Requirements

None

Production Unit Calculation

Each

J20046 – SERVICE COOLING - EMERG GENERATOR TUNNELS

Production Unit: Each occurrence

Purpose

This Activity includes the general maintenance, scheduled preventative maintenance, and monitoring and testing required for the cooling systems for the emergency stand-by power generators in tunnels and tubes. Includes the lubrication, adjustments, and cleaning of shafts, bearings, fan blades, safety guards, operational limit switches and interlocks, and pneumatic control valves and piping.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20047 – MAINTAIN EMERGENCY DIESEL GENERATOR TUNNELS

Production Unit: Each occurrence

Purpose

This Activity includes the general maintenance, scheduled preventative maintenance, and monitoring and testing required for the emergency stand-by power diesel generators in tunnels and tubes. Includes the lubrication, adjustments, and cleaning of shafts, bearings, fan blades, safety guards, operational limit switches and interlocks, pneumatic control valves and piping, and fuel systems.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20050 – WASH TUNNELS

Production Unit: Square feet

Purpose

This Activity includes the general tunnel lining maintenance, traffic control, tunnel lining washing, and drainage and wash water collection in tunnels and tubes.

Special Requirements

None

Production Unit Calculation

Square feet

(SQFT), Length (ft) x Width (ft) = 1 SQFT

J20051 – CLEAN DRAINS TUNNELS

Production Unit: Each occurrence

Purpose

This Activity includes the general tunnel drainline and drainage inlet maintenance, and traffic control in tunnels and tubes.

Special Requirements

None

Production Unit Calculation

Each occurrence

J20060 – RELAMP TUNNELS

Production Unit: Each occurrence

Purpose

This Activity includes the relamping, general tunnel lighting maintenance, lighting controls and wiring, traffic control, tunnel lighting washing, and drainage and wash water collection in tunnels and tubes.

Special Requirements

None

Production Unit Calculation

Each occurrence

J30001 – INSPECTIONS FERRYBOATS

Production Unit: Each occurrence

Purpose

This Activity covers support activities for routine inspections of all ferryboats and ferryboat facilities. Support activities include assisting Division of Maintenance, Structure Maintenance and Investigations Engineers during their inspections by providing access, historical records, labor support for moving equipment during inspection, inspection tools, and for operating equipment during inspections.

Special Requirements

None

Production Unit Calculation

Each occurrence

J30002 – COMPLAINT INVESTIGATION FERRYBOATS

Production Unit: Each occurrence

Purpose

This Activity covers complaint investigation of the all components of ferryboats. This type of inspection is usually considered an emergency and results from the ferryboat master not being able to operate the ferryboat due to an equipment failure. Also includes support activities for emergency follow-up inspections by Division of Maintenance, Structure Maintenance and Investigations Engineers or the Equipment Services Engineers that result from the initial complaint investigation. Support activities include assisting the engineering staff during their investigations by providing access, historical records, labor support for moving equipment during inspection, inspection tools, and for operating equipment during investigations.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

None

Production Unit Calculation

Each occurrence

J30010 – MAINTENANCE & REPAIR FERRYBOATS

Production Unit: Each

Purpose

This Activity is for all repairs to existing structural, mechanical and electrical equipment. This work is typically resulting from an inspection report condition and recommendation, or from consultation with the Division of Maintenance, Structure Maintenance and Investigations Engineers.

Special Requirements

None

Production Unit Calculation

Each

J30080 – OPERATIONS FERRYBOATS

Production Unit: Trip

Purpose

This Activity is for the actual operating of the ferryboats by the Operators and Deckhands. This Activity also includes support activities including supervision and support staff.

Special Requirements

None

Production Unit Calculation

Trip

J40001 – INSPECTION TRANSBAY TERMINAL

Production Unit: Each occurrence

Purpose

During the construction of or modifications to the San Francisco Oakland Bay Bridge Terminal (SFOBB) and its systems, there are occasions when Maintenance is asked to work with the Construction or Permits Branch to assist in the review of projects.

Examples of when to use:

- Producing 'Punch Lists'.
- Verifying construction techniques meet Standard Specifications, Standard Plans, Construction Plans, or National Electrical Code.
- Assisting Construction inspectors on technical issues.

Do not use this Activity when:

- Performing routine PM checks (see J40003).
- Performing project inspections on other bridge related items (Not SFOBB Terminal). (See Hxxxxx).

Special Requirements

Construction or Permit Expenditure Authorization is required.

Do not use the standard toll bridge Expenditure Authorization and/or Subjobs when charging project inspection work.

Production Unit Calculation

Each project reviewed.

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J40002 – COMPLAINT INVESTIGATION TRANSBAY TERMINAL

Production Unit: Each occurrence

Purpose

This Activity covers complaint investigation of mechanical, electrical, and all components of busses, pedestrian, and walkways at the San Francisco Oakland Bay Bridge Transit Bay Terminal. Responding to complaints may require an initial investigation of the site to determine the best course of action to take to remedy the problem.

Also includes support activities for emergency follow-up inspections by Division of Maintenance, Structure Maintenance and Investigations Engineers, or the Equipment Services Engineers that result from the initial complaint investigation. Support activities include assisting the engineering staff during their investigations by providing access, historical records, labor support for moving equipment during investigation, inspection tools, and for operating equipment during investigations.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Do not use when:

- Performing repairs.
- Performing routine PM checks (see J40003).
- Performing project inspections on other bridge related items (see Hxxxxx).

Special Requirements

Expenditure Authorization and Subjob required.

The SFOBB, Transit Bay Terminal has a unique Expenditure Authorization and Sub Job as follows:

TRANSBAY TERMINAL BUILDING						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Transbay Terminal	APP (TTT)	J4xxxx	N/A	926857	3T89B

Production Unit Calculation

Each complaint investigated.

J40003 – PM CHECK TRANSBAY TERMINAL

Production Unit: Each

Purpose

The San Francisco Oakland Bay Bridge Terminal (SFOBB) and its systems require a Preventative Maintenance (PM) check at a set frequency. Use this Activity to capture charges for PM checks at the SFOBB Terminal.

Refer to Maintenance Manuals Volume 1 and 2 for the proper frequencies.

Special Requirements

Expenditure Authorization and Subjob required.

The SFOBB, Transit Bay Terminal has a unique Expenditure Authorization and Sub Job as follows:

TRANSBAY TERMINAL BUILDING						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Transbay Terminal	APP (TTT)	J4xxxx	N/A	926857	3T89B

Production Unit Calculation

Each

Count one (1) per each inspection.

J40009 – UNDERGROUND SERVICE ALERT (Locate Facilities) TRANSBAY TERMINAL

Production Units : Each occurrence

Purpose

This Activity includes time spent locating facilities for others and locating facilities when Maintenance employees will perform excavation.

Use this Activity when Maintenance personnel are asked to locate and mark Caltrans owned underground facilities (conduits, pull boxes, etc.) in the area of the San Francisco Oakland Bay Bridge Terminal (SFOBB) prior to excavation work being performed in the area by others.

Requests can come from the following, but would not be limited to:

- Construction Branch
- Permits Branch
- Other Maintenance crews
- Regional “One Call” Center

Anytime Caltrans Maintenance personnel perform any excavation with power equipment (power auger, power trencher, backhoe, etc.), it is required that the site be marked and a Regional “One Call” Center be notified. Charge to this Activity for calling and marking the location prior to work being performed by Maintenance crews. Examples of activities that would require power assisted excavation are; J40010 (Facility Repairs), J40011 (Electrical Repairs), or J40020 (Day Labor).

Do not use this Activity for any location other than the SFOBB Terminal.

Special Requirements

Expenditure Authorization and Subjob required.

The SFOBB, Transit Bay Terminal has a unique Expenditure Authorization and Sub Job as follows:

TRANSBAY TERMINAL BUILDING						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Transbay Terminal	APP (TTT)	J4xxxx	N/A	926857	3T89B

NOTE:

Special Designation of MUSA is required for only those districts involved with the “One Call” pilot program.

Production Unit Calculation: Each occurrence. Charge the number of assets involved in the area of locating.

J40010 – FACILITY REPAIR TRANSBAY TERMINAL

Production Unit: Each occurrence

Purpose

Use this Activity when performing repairs at the San Francisco Oakland Bay Bridge Terminal (SFOBB) and its surrounding equipment for the purpose of restoring them to full service. This includes temporary repairs.

Work included, but not limited to:

- Repairs to terminal structure.
- Repairs to plumbing, heating, etc.
- Repairs to terminal facade (doors, windows, etc.).

Do not use this Activity for:

- SFOBB Terminal electrical repair (see J40011).
- Repairs to bridge (see Hxxxxx).
- Repairs to toll booths, Toll Collection Equipment, or Toll Plaza Buildings (see J7xxxx).

Special Requirements

Expenditure Authorization and Subjob required.

The SFOBB, Transit Bay Terminal has a unique Expenditure Authorization and Sub Job as follows:

TRANSBAY TERMINAL BUILDING						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Transbay Terminal	APP (TTT)	J4xxxx	N/A	926857	3T89B

Production Unit Calculation

Each visit to a facility when repairs are made.

J40011 – ELECTRICAL REPAIR TRANSBAY TERMINAL

Production Unit: Each occurrence

Purpose

Use this Activity when performing **electrical repairs at** the San Francisco Oakland Bay Bridge Terminal (SFOBB) and it's surrounding equipment for the purpose of restoring them to full service. This includes temporary repairs or troubleshooting to determine the cause and remedy.

Work included, but not limited to:

- Electrical repairs to terminal building lighting.
- Electrical repairs to equipment.

Do not use this Activity for:

- Repairs to bridge (see Hxxxxx).
- Electrical repairs to Call Boxes (see Hxxxxx).
- Electrical repairs to toll booths, Toll Collection Equipment, or Toll Plaza Buildings (see J70011).

Special Requirements

Expenditure Authorization and Subjob required.

The SFOBB, Transit Bay Terminal has a unique Expenditure Authorization and Sub Job as follows:

TRANSBAY TERMINAL BUILDING						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Transbay Terminal	APP (TTT)	J4xxxx	N/A	926857	3T89B

Production Unit Calculation

Each occurrence

J40012 – GROUNDS MAINTENANCE TRANSBAY TRANSIT TERMINAL

Production Unit: None

Purpose

Use this Activity for the maintenance and general upkeep of the grounds surrounding and associated with the San Francisco Oakland Bay Bridge Terminal (SFOBB).

Work included, but not limited to:

- General landscaping (weeding, planting, etc.)
- Programming irrigation systems.
- Manual watering.
- Mowing and edging.
- Picking up litter or debris.
- Pruning

Do not use this Activity for:

- Maintenance or upkeep to bridge (see Hxxxxx).
- Maintenance or upkeep to toll booths or Toll Plaza Building (see J7xxxx).

Special Requirements

Expenditure Authorization and Subjob required.

The SFOBB, Transit Bay Terminal has a unique Expenditure Authorization and Sub Job as follows:

TRANSBAY TERMINAL BUILDING						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Transbay Terminal	APP (TTT)	J4xxxx	N/A	926857	3T89B

Production Unit Calculation

None

J40020 – DAY LABOR – TRANSBAY TERMINAL

Production Units: Each occurrence

Purpose

Use when performing work on the San Francisco Oakland Bay Bridge Terminal (SFOBB) with a Day Labor Work Order.

Work included, but not limited to:

- Modifications to the existing SFOBB Terminal.
- Installation of additional equipment associated with the SFOBB Terminal.
- Modification of existing equipment associated with the SFOBB Terminal.
- Removal of existing equipment associated with the SFOBB Terminal.
- Complete removal of the SFOBB Terminal.

Special Requirements

Day labor Expenditure Authorization required..

A Subjob is not required unless specified by the provider of the Day Labor EA.

Do not use the standard toll bridge Expenditure Authorization and/or Subjobs when charging Day Labor work

Production Unit Calculation

Each occurrence

- Charge one production unit for each project.
- Should always be one (1) per Work Order.

J40050 – JANITORIAL – TRANSBAY TRANSIT TERMINAL**Production Unit:** Hours**Purpose**

Use this Activity for general janitorial work performed at the San Francisco Oakland Bay Bridge Terminal (SFOBB).

Work included, but not limited to:

- Cleaning floors.
- Cleaning rest rooms.
- Emptying trash receptacles.

Do not use this Activity for:

- Janitorial work to bridge (see Hxxxxx).
- Janitorial work to Toll Plaza Buildings (see J7xxxx).

Special Requirements

Expenditure Authorization and Subjob required.

The SFOBB, Transit Bay Terminal has a unique Expenditure Authorization and Sub Job as follows:

TRANSBAY TERMINAL BUILDING						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Transbay Terminal	APP (TTT)	J4xxxx	N/A	926857	3T89B

Production Unit Calculation

Person hours used performing this work activity.

J50000 – TOW TRUCK OPERATION TOW SERVICES

Production Unit: Hour(s)

Purpose

Provide the means to remove obstructions (vehicles and debris) from toll bridges and their approaches and departures. This includes dispatching and logging of calls. Supervisor's time is also captured in the program.

Special Requirements

A Subjob is required when recording Tow Truck Operations. Use the Subjob for the specific bridge from the list below.

Antioch	3T93C
Benicia - Martinez	3T98C
Carquinez	3T97C
Richmond - San Rafael	3T91C
Dumbarton	3T96C
San Mateo - Hayward	3T95C
San Francisco - Oakland Bay	3T94C

Production Unit Calculation

Hours of operation.

J50100 – BICYCLE SHUTTLE

Production Unit: Each

Purpose

Provide a means during commute to move bicycles to and from Oakland BART and the San Francisco Transbay Terminal

Special Requirements

None

Production Unit Calculation

Count each person and bicycle transported.

J60001 – INSPECTION CHANNELIZERS

Production Unit: Vehicle miles

Purpose

Toll Plazas :

This Activity used when checking number of missing channelizers in advance of each toll booth, lines departing toll booths, and lane lines separating car pool lanes. This is a daylight inspection used to plan maintenance on channelizers.

Tunnels, Tubes, and other facilities :

All channelizer inspections as required.

Do not use this Activity for repair of channelizers or scheduled lane changes.

Special Requirements

When channelizer work is performed in advance of and departing toll booths, Subjobs and Expenditure Authorizations are required as follows:

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
	Benicia - Martinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
	Carquinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
	Richmond - San Rafael	APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
	Dumbarton	APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
	San Mateo - Hayward	APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
	SFOBB	APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B

Production Unit Calculation

Vehicle miles

J60002 – COMPLAINT INVESTIGATION CHANNELIZERS

Production Unit: Each occurrence

Purpose

This Activity covers responding to complaints regarding channelizing for an initial investigation of the site to determine the best course of action to take to remedy the problem.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

When channelizer work activity is performed in advance of and departing toll booths, Expenditure Authorizations and Subjobs are required as follows:

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
	Benicia - Martinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
	Carquinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
	Richmond - San Rafael	APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
	Dumbarton	APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
	San Mateo - Hayward	APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
	SFOBB	APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B

Production Unit Calculation

Each complaint investigated.

J60003 – NIGHT INSPECTION CHANNELIZERS

Production Unit: Vehicle miles

Purpose

Per required night inspection schedule, identify number of missing or nor reflective channelizers.

Special Requirements

When channelizer work activity is performed in advance of and departing toll booths, Subjobs and Expenditure Authorizations are required as follows:

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
Antioch		APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
Benicia - Martinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
Carquinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
Richmond - San Rafael		APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
Dumbarton		APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
San Mateo - Hayward		APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
SFOBB		APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B

Production Unit Calculation

Vehicle miles

J60009 – UNDERGROUND SERVICE ALERT (Locate Facilities) CHANNELIZER

Production Unit: Each occurrence

Purpose

This Activity is for Maintenance personnel when they are asked to locate and mark Caltrans owned underground facilities (conduits, pull boxes, etc.) in the area of channelizers.

Requests can come from the following, but would not be limited to:

- Construction Branch
- Permits Branch
- Other Maintenance crews
- Regional 'One Call' Center

Do not use this Activity for calling and marking prior to digging as part of a maintenance function. See note below.

Anytime Caltrans Maintenance personnel perform any excavation with power equipment (power auger, power trencher, backhoe, etc.), it is required that the site be marked and a regional "One Call" center be notified. The time spent on calling and marking the location prior to work being performed by Maintenance crews is a task associated with the specific Activity. Examples of Activities that would require power assisted excavation are; J40010 (Facility Repairs), J40011 (Electrical Repairs), or J40020 (Day Labor).

Special Requirements

When channelizer work activity is performed in advance of and departing toll booths, Subjobs and Expenditure Authorizations are required as follows:

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
Antioch		APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
Benicia - Martinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
Carquinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
Richmond - San Rafael		APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
Dumbarton		APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
San Mateo - Hayward		APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
SFOBB		APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B

Production Unit Calculation

Each occurrence

J60010 – REPAIR/REPLACE CHANNELIZERS

Production Unit: Each

Purpose

This Activity is used for repair and replace of all channelizing systems statewide including the following:

POP-UP SYSTEMS – including CALDECOTT TUNNELS - District 04

Removal, repair, and replacement of **POP-UP** channelizers including:

- Copper air lines, and rubber feeder lines associated with the channelizer system.
- Solenoid valves used to actuate the channelizer system.
- Relays, matrixes, coils, contacts, etc. that are associated with the control of the pop-up system.
- All welding associated with the channelizer cover plates including nuts, bolts, and the stainless steel shell, which house the channelizers in the roadway.

MOVABLE BARRIERS – including SAN DIEGO - CORONADO District 11

- Repair and replacement of movable barrier reflectors.
- Routine maintenance of transport and transfer vehicle (TTV) when assisting field mechanic.

TOLL BRIDGES – District 04

Replacement of missing and knocked down channelizers in advance of each toll booth and departing lines after some toll booths, and lane lines separating car pool lanes.

Special Requirements

San Diego – Coronado Bridge – District 11

When this Activity is used for San Diego-Coronado Bay Bridge, **Expenditure Authorization 936501 and Subjob 3HOVM** are **required**. Additional coding requirements may be necessary. Contact your District IMMS Coordinator to insure you are meeting all Special Reporting Requirements for this Activity.

J60010 – REPAIR/REPLACE
CHANNELIZERS

Continued on the following page

J60010 – REPAIR/REPLACE**CHANNELIZERS****Continued****SPECIAL REQUIREMENTS (Continued)****TOLL BRIDGES – District 04**

When channelizer work activity is performed in advance of and departing toll booths, departing lines after some toll booths, and lane lines separating car pool lanes, **Expenditure Authorization and Subjob is required. See table below:**

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT

IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
	Benicia - Martinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
	Carquinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
	Richmond - San Rafael	APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
	Dumbarton	APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
	San Mateo - Hayward	APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
	SFOBB	APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B

Production Unit Calculation

Each channelizer

J60020 -DAY LABOR CHANNELIZERS

Production Unit: Each

Purpose

Use when performing work on channelizers with a Day Labor Work Order.

Work included, but not limited to:

- Modifications to the existing channelizers.
- Installation of additional channelizers.
- Modification of existing channelizers.
- Removal of existing channelizers.

Special Requirements

Day labor Expenditure Authorization required.

A Subjob is not required unless specified by the provider of the Day Labor EA.

Do not use the standard Toll Bridge Expenditure Authorization and/or Subjobs when charging Day Labor work.

Production Unit Calculation

Each removal or replacement is counted as (1).

J60050 – SCHEDULED LANE CHANGE CHANNELIZERS

Production Unit: Each occurrence

Purpose

This Activity is used for switching the direction of traffic lanes, normally to accommodate traffic volume.

For Caldecott Tunnel operations, this Activity is used when switching from either E/B to W/B or W/B to E/B in order to accommodate traffic volume, or when either bore#1 or bore #3 are closed for maintenance.

For the San Diego-Coronado Bay Bridge, this Activity is used to transfer the movable barrier to accommodate traffic volume. It is associated with the operational aspects of the system.

Do not use for routine maintenance of channelizers or for lane closures for maintenance or emergency operations.

Special Requirements

San Diego – Coronado Bridge – District 11

When this Activity is used for San Diego-Coronado Bay Bridge, **Expenditure Authorization 936501 and Subjob 3HOVM** are **required**. Additional coding requirements may be necessary. Contact your District IMMS Coordinator to insure you are meeting all Special Reporting Requirements for this Activity.

TOLL BRIDGES – District 04

When scheduled lane changes for routine channelizing of traffic is performed in advance of, and departing toll booths, departing lines after some toll booths, and lane lines separating car pool lanes, **Expenditure Authorization and Subjob is required. See table below.**

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT

IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
Antioch		APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
Benicia - Martinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
Carquinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
Richmond - San Rafael		APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
Dumbarton		APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
San Mateo - Hayward		APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
SFOBB		APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B

Production Unit Calculation : Each occurrence

J70001 - PROJECT INSPECTION TOLL PLAZA

Production Units: Each occurrence

Purpose

During the construction of or modifications to a Toll Collection Plaza system, there are occasions when Maintenance is asked to work with the Construction or Permits Branch to assist in the review of projects.

Examples of when to use:

- Producing 'Punch Lists'.
- Verifying construction techniques meet Standard Specifications, Standard Plans, Construction Plans, or National Electrical Code.
- Assisting Construction inspectors on technical issues.

Do not use this Activity for:

- Performing routine PM checks (see J70003).
- Performing inspections on other bridge related items (see Hxxxxx).

Special Requirements

Construction or Permit Expenditure Authorization is required.

In advance, a valid EA that Maintenance can use must be obtained from the office requesting the work.

Do not use the standard toll bridge Expenditure Authorization and/or Subjobs when charging project inspection work.

Production Unit Calculation

Each occurrence

- Count one for each Toll Collection Plaza system inspected.
- Should always be one (1) per Work Order.

J70002 – COMPLAINT INVESTIGATION TOLL PLAZA

Production Unit: Each occurrence

Purpose

This Activity covers responding to complaints regarding Toll Collection facilities or Toll Plaza Building for an initial investigation of the site to determine the best course of action to take to remedy the problem.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

Subjobs and Expenditure Authorizations are required as follows:

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
	Benicia - Martinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
	Carquinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
	Richmond - San Rafael	APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
	Dumbarton	APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
	San Mateo - Hayward	APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
	SFOBB	APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B
MAINTENANCE AND REPAIR OF TOLL PLAZA BUILDING						
		ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP(TOLL)	J7xxxx	N/A	970305	N/A
	Benicia - Martinez	APP(TOLL)	J7xxxx	N/A	970805	N/A
	Carquinez	APP(TOLL)	J7xxxx	N/A	970705	N/A
	Richmond - San Rafael	APP(TOLL)	J7xxxx	N/A	970105	N/A
	Dumbarton	APP(TOLL)	J7xxxx	N/A	970605	N/A
	San Mateo - Hayward	APP(TOLL)	J7xxxx	N/A	970505	N/A
	SFOBB	APP(TOLL)	J7xxxx	N/A	970405	N/A

Production Unit Calculation

Each complaint investigated.

J70003 – PM CHECK TOLL PLAZA

Production Units: Each

Purpose

Each Toll Collection Plaza asset requires a Preventative Maintenance (PM) check at a set frequency. Use this Activity to capture charges for PM checks at Toll Collection facilities.

See Maintenance Manuals Volume 1 and 2 for proper frequencies.

Special Requirements

Expenditure Authorization and Subjob required for maintenance performed on all TOLL BOOTH AND TOLL COLLECTION EQUIPMENT.

Each Toll Booth /Toll Collection Equipment has unique coding requirements. See table below:

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
Antioch		APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
Benicia - Martinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
Carquinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
Richmond - San Rafael		APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
Dumbarton		APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
San Mateo - Hayward		APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
SFOBB		APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B

Production Unit Calculation

Each

Count one (1) per each Toll Collection system inspected.

J70009 – UNDERGROUND SERVICE ALERT (Locate Facilities) TOLL PLAZA

Production Units: Each occurrence

Purpose

This Activity includes time spent locating facilities for others and locating facilities when Maintenance employees will perform excavation.

Use this Activity when Maintenance personnel are asked to locate and mark Caltrans owned underground facilities (conduits, pull boxes, etc.) in the area of the toll booth or Toll Plaza Buildings prior to excavation work being performed in the area by others.

Requests can come from the following, but would not be limited to:

- Construction Branch
- Permits Branch
- Other Maintenance crews
- Regional 'One Call' Center

Anytime Caltrans Maintenance personnel perform any excavation with power equipment (power auger, power trencher, backhoe, etc.), it is required that the site be marked and a Regional 'One Call' Center be notified. Charge to this Activity for calling and marking the location prior to work being performed by Maintenance crews. Examples of activities that would require power assisted excavation are; J40010 (Facility Repairs), J40011 (Electrical Repairs), or J40020 (Day Labor).

Do not use this Activity for any location other than the Toll Booth and Toll Collection Equipment.

J70009

Underground Service Alert

Continued on following page

SEE FOLLOWING PAGE FOR J70009 SPECIAL REPORTING REQUIREMENTS

J70009

Underground Service Alert

Continued**Special Requirements**

- Expenditure Authorization **and** Subjob required for maintenance performed on all TOLL BOOTH AND TOLL COLLECTION EQUIPMENT.
- Expenditure Authorization is required for all maintenance performed at TOLL PLAZA BUILDINGS.

Each Toll Collection Plaza Building and toll booth and Toll Collection Equipment have unique coding requirements. See table below:

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
	Benicia - Martinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
	Carquinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
	Richmond - San Rafael	APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
	Dumbarton	APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
	San Mateo - Hayward	APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
	SFOBB	APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B
MAINTENANCE AND REPAIR OF TOLL PLAZA BUILDING						
		ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP(TOLL)	J7xxxx	N/A	970305	N/A
	Benicia - Martinez	APP(TOLL)	J7xxxx	N/A	970805	N/A
	Carquinez	APP(TOLL)	J7xxxx	N/A	970705	N/A
	Richmond - San Rafael	APP(TOLL)	J7xxxx	N/A	970105	N/A
	Dumbarton	APP(TOLL)	J7xxxx	N/A	970605	N/A
	San Mateo - Hayward	APP(TOLL)	J7xxxx	N/A	970505	N/A
	SFOBB	APP(TOLL)	J7xxxx	N/A	970405	N/A

NOTE:

Special Designation of **MUSA** is required for only those districts involved with the 'One Call' pilot program.

Production Unit Calculation

Each occurrence

Charge number of assets involved in the area of locating.

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J70010 – FACILITY REPAIRS TOLL PLAZA

Production Unit: Each occurrence

Purpose

Repairs performed on Toll Collection Plaza BUILDING for the purpose of restoring them to full service or performing temporary repairs needed should be charged to this Activity. (With the exception of electrical work).

Work included, but not limited to:

- Repairs to Toll Plaza Building structure.
- Repairs to plumbing, heating, etc.
- Repairs to Plaza facade (doors, windows, etc.).

Do not use this Activity for:

- Electrical repairs (see J70011).
- Repairs to bridge (see Hxxxxx).
- Repairs to SFOBB (see J4xxxx).
- Repairs to toll booths / canopy (see J70013).

Special Requirements

Expenditure Authorization required.

Each Toll Plaza **Building** has a unique Expenditure Authorization as follows:

MAINTENANCE AND REPAIR OF TOLL PLAZA BUILDING					
	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
Antioch	APP(TOLL)	J7xxxx	N/A	970305	N/A
Benicia - Martinez	APP(TOLL)	J7xxxx	N/A	970805	N/A
Carquinez	APP(TOLL)	J7xxxx	N/A	970705	N/A
Richmond - San Rafael	APP(TOLL)	J7xxxx	N/A	970105	N/A
Dumbarton	APP(TOLL)	J7xxxx	N/A	970605	N/A
San Mateo - Hayward	APP(TOLL)	J7xxxx	N/A	970505	N/A
SFOBB	APP(TOLL)	J7xxxx	N/A	970405	N/A

Production Unit Calculation

Each visit to a facility when repairs are made.

J70011 – ELECTRICAL REPAIR TOLL PLAZA

Production Units: Each occurrence

Purpose

Electrical repairs performed on Toll Collection Equipment, Toll Booths, and Toll Plaza Buildings for the purpose of restoring them to full service or performing temporary repairs needed should be charged to this Activity. This includes troubleshooting to determine the cause and remedy for repairs.

Work included but not limited to:

- Repairs to system wiring.
- Repairs to Toll Collection Booth lighting.
- Repairs to lane lighting under toll collection canopy.
- Replacement of toll collection equipment.

Do not use this Activity for:

- Electrical repairs to bridge equipment (power supplies, elevators, motors, etc.). (See Hxxxxx).
- Repairs to Call Boxes (see Hxxxxx).
- Repairs to the SFOBB (see J40011).

J70011

Electrical Repair – Toll Plaza

Continued on next page

See following page for SPECIAL REPORTING REQUIREMENTS FOR J70011

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J70011

Electrical Repair – Toll Plaza

Continued**Special Requirements**

Expenditure Authorization AND Subjob required. See table below.

NOTE: When working on ATCAS equipment, Special Designation **MATCAS** is required in addition to Toll Booth and Toll Collection or Toll Plaza Building EA and Subjob.

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
	Benicia - Martinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
	Carquinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
	Richmond - San Rafael	APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
	Dumbarton	APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
	San Mateo - Hayward	APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
	SFOBB	APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B
MAINTENANCE AND REPAIR OF TOLL PLAZA BUILDING						
		ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP(TOLL)	J7xxxx	N/A	970305	N/A
	Benicia - Martinez	APP(TOLL)	J7xxxx	N/A	970805	N/A
	Carquinez	APP(TOLL)	J7xxxx	N/A	970705	N/A
	Richmond - San Rafael	APP(TOLL)	J7xxxx	N/A	970105	N/A
	Dumbarton	APP(TOLL)	J7xxxx	N/A	970605	N/A
	San Mateo - Hayward	APP(TOLL)	J7xxxx	N/A	970505	N/A
	SFOBB	APP(TOLL)	J7xxxx	N/A	970405	N/A
AUTOMATIC TOLL COLLECTION ACCOUNTING SYSTEM (ATCAS)						
IMMS	ASSET NAME	ASSET TYPE	Activity	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP(TOLL)	J7xxxx	MATCAS	926851	3T93B
	Benicia -Martinez	APP(TOLL)	J7xxxx	MATCAS	926852	3T98B
	Carquinez	APP(TOLL)	J7xxxx	MATCAS	926853	3T97B
	Richmond - San Rafael	APP(TOLL)	J7xxxx	MATCAS	926854	3T91B
	Dumbarton	APP(TOLL)	J7xxxx	MATCAS	926855	3T96B
	San Mateo - Hayward	APP(TOLL)	J7xxxx	MATCAS	926856	3T95B
	SFOBB	APP(TOLL)	J7xxxx	MATCAS	926857	3T94B

Production Unit Calculation

Each occurrence

J70013 - BOOTH AND CANOPY MAINTENANCE TOLL PLAZA

Production Unit: None

Purpose

Repairs performed on Toll Collection Booth and Canopy structures for the purpose of restoring them to full service or performing temporary repairs as needed. Also includes litter and weed control, pavement, and water attenuaters.

Water attenuaters maintained minimum twice a year.

Do not use for electrical repairs (see J70011).

Special Requirements

Expenditure Authorization and Subjob required as follows:

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
Antioch		APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
Benicia - Martinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
Carquinez		APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
Richmond - San Rafael		APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
Dumbarton		APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
San Mateo - Hayward		APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
SFOBB		APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B

Production Unit Calculation

None

J70050 - LANE SCRUBBING TOLL PLAZA

Production Unit: Each

Purpose

To remove excessive oil buildup on the concrete pad at the toll booths

Special Requirements

Expenditure Authorization and Subjob required as follows:

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
	Benicia - Martinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
	Carquinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
	Richmond - San Rafael	APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
	Dumbarton	APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
	San Mateo - Hayward	APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
	SFOBB	APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B

Production Unit Calculation

Each

J70060 – PAINTING TOLL PLAZA

Production Unit: Square feet

Purpose

Painting toll booths, tunnels and admiration (inside and out).

Special Requirements

Expenditure Authorization and Subjob required as follows:

TOLL BOOTH AND TOLL COLLECTION EQUIPMENT						
IMMS	ASSET NAME	ASSET TYPE	ACTIVITY	SPECIAL DESIGNATION	EA	SUBJOB
	Antioch	APP (TOLL)	J7xxxx / J6xxx	N/A	926851	3T93B
	Benicia - Martinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926852	3T98B
	Carquinez	APP (TOLL)	J7xxxx / J6xxx	N/A	926853	3T97B
	Richmond - San Rafael	APP (TOLL)	J7xxxx / J6xxx	N/A	926854	3T91B
	Dumbarton	APP (TOLL)	J7xxxx / J6xxx	N/A	926855	3T96B
	San Mateo - Hayward	APP (TOLL)	J7xxxx / J6xxx	N/A	926856	3T95B
	SFOBB	APP (TOLL)	J7xxxx / J6xxx	N/A	926857	3T94B

Production Unit Calculation

Square feet

J90110 – CALIBRATE/REPAIR TEST EQUIPMENT

Production Unit: Each

Purpose

Work performed, in Central Repair Shops, when calibrating and / or repairing test equipment used in the repairs or monitoring of highway pumping plants, toll collection plazas, tunnels and tubes, and SFOBB Trans Bay Terminal assets.

Work included but not limited to:

- Calibration and / or repair of test meters (VOM, Megger, etc.).
- Calibration and / or repair of test equipment.
- Calibration and / or repair of Conflict Monitor testers.
- Calibration and / or repair of Gastechs, O2 meters, etc.

Do not use this Activity for calibration in conjunction with repairs to a component associated with a specific asset. Calibration, if needed, should be part of the component repair and charged to the specific asset with the appropriate Activity.

Special Requirements

Charge to appropriate Central Repair Shop Facility (FAC) where the calibration is performed.

Expenditure Authorization and Subjob required.

The SFOBB Transit Bay Terminal and each Toll Collection Plaza, has a unique Expenditure Authorization and Sub Job. When working on these assets, use the appropriate EA and Subjob.

Production Unit Calculation

Each

- Charge one production unit per each piece of equipment tested.
- Can be more than one (1) per Work Order.

LIGHTING ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
K10001	PROJECT INSPECTION	EA	Each	LGHT,RW
K10003	NIGHT INSPECTION	EA	Each	RW
K10004	INVENTORY UPDATE	HR	Hours	RW
K10010	REPAIR/REPLACE	EA	Each	LGHT,RW
K10011	ACCIDENT DAMAGE	EA	Each	LGHT
K10020	DAY LABOR	EA	Each	RW
K10070	GROUP RELAMP	EA	Each	LGHT,RW

SIGN LIGHTING ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
K20001	PROJECT INSPECTION	EA	Each	LGHT,RW
K20003	NIGHT INSPECTION	EA	Each	RW
K20004	INVENTORY UPDATE	HR	Hours	RW
K20010	REPAIR/REPLACE	EA	Each	LGHT,RW
K20011	ACCIDENT DAMAGE	EA	Each	LGHT
K20020	DAY LABOR	EA	Each	RW
K20070	GROUP RELAMP	EA	Each	LGHT,RW

TOLL COLLECTION AND CALL BOXES (K3)

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
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ALL K3 ACTIVITIES HAVE BEEN EXPIRED
THIS WORK ACTIVITY NOW REPORTED IN THE J FAMILY

July 2005

TRAFFIC SIGNALS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
K40001	PROJECT INSPECTION	EA	Each	RW,SGNL
K40004	INVENTORY UPDATE	HR	Hours	RW
K40005	PM CHECK	EA	Each	SGNL
K40006	CONFLICT MONITOR CHECK	EA	Each	SGNL
K40010	REPAIR/REPLACE	EA	Each	SGNL
K40011	ACCIDENT DAMAGE	EA	Each	SGNL
K40020	DAY LABOR	EA	Each	RW
K40070	GROUP RELAMP	EA	Each	SGNL

FLASHING BEACONS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
K50001	PROJECT INSPECTION	EA	Each	RW,SGNL
K50004	INVENTORY UPDATE	HR	Hours	RW
K50005	PM CHECK	EA	Each	SGNL
K50010	REPAIR/REPLACE	EA	Each	SGNL
K50011	ACCIDENT DAMAGE	EA	Each	SGNL
K50020	DAY LABOR	EA	Each	RW
K50070	GROUP RELAMP	EA	Each	SGNL

RAMP METERS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
K60001	PROJECT INSPECTION	EA	Each	RW,SGNL
K60004	INVENTORY UPDATE	HR	Hours	RW
K60005	PM CHECK	EA	Each	SGNL
K60010	REPAIR/REPLACE	EA	Each	SGNL
K60011	ACCIDENT DAMAGE	EA	Each	SGNL
K60020	DAY LABOR	EA	Each	RW
K60070	GROUP RELAMP	EA	Each	SGNL

TMS FIELD ELEMENTS

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
K70001	PROJECT INSPECTION	EA	Each	RW,SGNL
K70004	INVENTORY UPDATE	HR	Hours	RW
K70005	PM CHECK	EA	Each	RW,SGNL
K70010	REPAIR/REPLACE	EA	Each	RW,SGNL
K70011	ACCIDENT DAMAGE	EA	Each	SGNL
K70020	DAY LABOR	EA	Each	RW
K70070	GROUP RELAMP	EA	Each	RW,SGNL

July 2005

TRAFFIC CENSUS SYSTEM ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
K80001	PROJECT INSPECTION	EA	Each	RW,SGNL
K80004	INVENTORY UPDATE	HR	Hours	RW
K80005	PM CHECK	EA	Each	RW,SGNL
K80010	REPAIR/REPLACE	EA	Each	SGNL
K80011	ACCIDENT DAMAGE	EA	Each	SGNL
K80020	DAY LABOR	EA	Each	RW

MISCELLANEOUS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
K90008	LOCATE FACILITIES	EAOC	Each Occurrence	RW
K90100	TEST NEW EQUIP NOT INSTALLED	EA	Each	FAC
K90110	CALIBRATION TEST EQUIP	EA	Each	FAC

July 2005

K10001 – PROJECT INSPECTION

Production Unit: Each

Purpose

This Activity is for Electrical Maintenance personnel when they are asked to assist with the inspection of Construction and Permit projects on Highway Lighting systems.

Examples of when to use:

- Producing 'Punch Lists'.
- Verifying construction techniques, meet National Electrical Code, Standard Specifications, or Standard Plans.
- Assisting Construction Inspectors on technical issues.

Do not use :

- Performing routine night light inspections (see K10003).
- Repairs to accident damage (see K10011).

Special Requirements

- Construction or Permit Expenditure Authorization (EA) is required.
- Use Roadway (RW) for new Highway Lighting systems that are not in IMMS.
- Charge to specific asset if it exists in IMMS.
- Charge to roadway (RW) with post mile range if multiple assets are involved.

Production Unit Calculation

Each

- Count one for each Highway Lighting system inspected.
- Should always be one (1) per Work Order.

July 2005

K10003 – NIGHT INSPECTION

Production Unit: Each

Purpose

Use when performing the monthly night light inspection on Highway Lighting.

- **Do not** use for assisting Permits or Construction Divisions when inspecting work (see K10001).

Special Requirements

Charge to Roadway (RW).

Production Unit Calculation

Each

K10004 – INVENTORY UPDATE

Production Unit: Hours

Purpose

Use when performing verification of Highway Lighting assets for the purpose of updating the Signals and Lighting Inventory (SLI) in IMMS.

Use when:

- Verifying field inventory.
- Updating IMMS or other records.
- Performing maintenance on other records associated with SLI, IMMS, or agreements.
- Generating reports needed in researching assets.

Do not use for updating inventory other than Signal and Lighting (see M90004).

Special Requirements

Charge to the Roadway (RW).

Production Unit Calculation

Hours

Number of hours spent updating Highway Lighting asset inventory.

July 2005

K10010 – REPAIR/REPLACE

Production Unit: Each

Purpose

Work performed on Highway Lighting assets for the purpose of restoring them to full service or performing temporary repairs. This includes troubleshooting to determine the cause and remedy for repairs.

Work included but not limited to:

- Repairs to field wiring.
- Repairs to Lighting fixtures.
- Repairs to Highway Lighting hardware.
- Repairs to control circuit wiring and PEC.
- Repairs to service pedestal.

Also use when replacing Highway Lighting components such as:

- Replacement of field wiring.
 - Replacement of lighting fixture(s).
 - Replacement of Highway Lighting hardware.
 - Replacement of control circuit wiring and PEC component(s).
 - Replacement of burnt out lamp.
 - Replacement of malfunctioning service pedestal (not third party damage).
- **Do not** use for repairs to accident damage (see K10011).

Special Requirements

- Charge to the asset when work performed is specific to that individual asset.
- Charge to the Roadway (RW) when work performed is not specific to one asset.
Examples:
 - When replacing pull box lids at multiple locations.
 - When working on circuit problems.
 - When working on lighting service pedestal.

Production Unit Calculation

Each

- Charge one production unit per Highway Lighting asset.
- Should always be one (1) per Work Order for specific asset.
- Can be more than one (1) when charging to Roadway (RW).

July 2005

K10011 – ACCIDENT DAMAGE

Production Unit: Each

Purpose

Work performed on Highway Lighting equipment that has been damaged by errant motorists, vandalism, or any other third party damage. Includes repairs or total replacement of the damaged equipment.

Work included but not limited to:

- Initial visits to clear debris and make safe.
- Repairs or replacement of highway lighting standard(s).
- Repairs or replacement of highway lighting hardware.
- Repairs or replacement of service pedestal.

The same IMMS Work Order is to be used for all visits to this Highway Lighting for the purpose of making repairs to damage caused by the accident. This will include the initial visit.

Special Requirements

- Must be charged to a specific Highway Lighting asset.
- Arrival and Departure time is suggested.
- Service Request is required if the responsible party is known or if the asset is shared with a local agency.
- Accident Log is required if the responsible party is known or if the asset is shared with a local agency.

Production Unit Calculation

Each

- Charge one production unit per Highway Lighting asset damaged at the completion of the repairs.
- Should always be one (1) per Work Order.
- **Do not** charge number of visits.
- **Do not** charge number of damaged equipment.
- **Do not** charge for number of persons responding or making repairs.

July 2005

K10020 – DAY LABOR

Production Unit: Each

Purpose

Use when performing Day Labor work on a Highway Lighting asset. This would include installation of a new asset, modifications to an existing, or complete removal of the entire asset.

Work included but not limited to:

- Removing an existing Highway Lighting standard or fixture.
- Moving an existing Highway Lighting standard or fixture.
- Modifications to existing mast arm, standard, or fixture.

Special Requirements

- Day Labor Expenditure Authorization (EA) required.
- Charge to specific asset if it exists in IMMS.
- Charge to the Roadway (RW) for new assets not yet in IMMS.

Production Unit Calculation

Each

- Charge one production unit per Highway Lighting asset installed, modified, or removed.
- Can be more than one (1) per Work Order.
- **Do not** count the number of equipment added or modified.

July 2005

K10070 – GROUP RELAMP

Production Unit: Each

Purpose

Each Highway Lighting asset requires lamp replacement at a set frequency. Use this Activity to capture charges for this relamping at Highway Lighting assets.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4, for the proper frequencies.

- **Do not** use for individual indication replacement (see K10010 – Repair Replace).

Special Requirements

Charge to Roadway (RW).

Production Unit Calculation

Each

- Charge one production unit per Highway Lighting asset relamped.
- May be more than one per Work Order.

July 2005

K20001 – PROJECT INSPECTION

Production Unit: Each

Purpose

This Activity is for Electrical Maintenance personnel when they are asked to assist with the inspection of Construction and Permit projects on Sign Lighting systems.

Examples of when to use:

- Producing 'Punch Lists'.
- Verifying construction techniques meet National Electrical Code, Standard Specifications, or Standard Plans.
- Assisting Construction Inspectors on technical issues.

Do not use this Activity for:

- Performing routine Night Light Inspections (see K10003).
- Repairs to accident damage (see K20011).

Special Requirements

- Construction or Permit Expenditure Authorization (EA) is required.
- Use Roadway (RW) for new Sign Lighting systems that are not in IMMS.

Production Unit Calculation

Each

- Count one for each Sign Lighting system inspected.
- Should always be one (1) per Work Order.

July 2005

K20003 – NIGHT INSPECTION

Production Unit: Each

Purpose

Use when performing the monthly night light Inspections on Sign Lighting systems.

Do not use for assisting Permits or Construction Branch when inspecting work (see K20001).

Special Requirements

Charge to Roadway (RW).

Production Unit Calculation

Each

K20004 – INVENTORY UPDATE

Production Unit: Hours

Purpose

Use when performing verification of Sign Lighting systems for the purpose of updating the Signals and Lighting Inventory (SLI) in IMMS.

Use when:

- Verifying field inventory.
- Updating IMMS or other records.
- Performing maintenance on other records associated with SLI, IMMS, or agreements.
- Generating reports needed in researching assets.

Special Requirements

Charge to the Roadway (RW).

Production Unit Calculation

Hours

Charge number of hours spent updating Overhead Sign Lighting asset inventory.

July 2005

K20010 – REPAIR/REPLACE

Production Unit: Each

Purpose

Work performed on Sign Lighting systems for the purpose of restoring them to full service or performing temporary repairs. This includes troubleshooting to determine the cause and remedy for repairs.

Work included but not limited to:

- Repairs to field wiring.
- Repairs to Lighting fixtures.
- Repairs to Sign Lighting hardware.
- Repairs to control circuit wiring and PEC.
- Repairs to service pedestal.

Also use when replacing Sign Lighting components such as:

- Replacement of field wiring.
 - Replacement of lighting fixture(s).
 - Replacement of Sign Lighting hardware.
 - Replacement of control circuit wiring and PEC component(s).
 - Replacement of burnt out lamp.
 - Replacement of malfunctioning service pedestal (not third party damage).
- **Do not** use for repairs to accident damage (see K20011).

Special Requirements

- Charge to the asset when work performed is specific to that individual asset.
- Charge to the Roadway (RW) when work performed is not specific to one asset.

Examples:

- When replacing pull box lids at multiple locations.
- When working on circuit problems.
- When working on lighting service pedestal.

Production Unit Calculation

Each

- Charge one production unit per Sign Lighting system fixture.
- Can be more than one (1) per Work Order for specific asset.
- Can be more than one (1) per Work Order when charging to Roadway (RW).

July 2005

K20011 – ACCIDENT DAMAGE

Production Unit: Each

Purpose

Work performed on Sign Lighting system equipment that has been damaged by errant motorists, vandalism, or any other third party damage. Includes repairs or total replacement of the damaged equipment.

Work included but not limited to:

- Initial visits to clear debris and make safe.
- Repairs or replacement of Sign Lighting standard(s).
- Repairs or replacement of Sign Lighting hardware.
- Repairs or replacement of service pedestal.

The same IMMS Work Order is to be used for all visits to this Sign Lighting for the purpose of making repairs to damage caused by the accident. This will include the initial visit.

Special Requirements

- Must be charged to a specific Sign Lighting asset.
- Arrival and Departure time is suggested.
- Service request is required if the responsible party is known or if the asset is shared with a local agency.
- Accident Log is required if the responsible party is known or if the asset is shared with a local agency.

Production Unit Calculation

Each

- Charge one production unit per Sign Lighting system asset damaged at the completion of the repairs.
- Should always be one (1) per Work Order.
- **Do not** charge number of visits.
- **Do not** charge number of damaged equipment.
- **Do not** charge for number of persons responding or making repairs.

July 2005

K20020 – DAY LABOR

Production Unit: Each

Purpose

Use when performing Day Labor work on a Sign Lighting system asset. This would include installation of a new asset, modifications to an existing, or complete removal of the entire asset.

Work included but not limited to:

- Removing an existing Sign Lighting fixture.
- Moving an existing Sign Lighting standard or fixture.
- Modifications to existing standard or fixture.

Special Requirements

- Day Labor Expenditure Authorization required.
- Charge to the asset if existing.
- Charge to the Roadway (RW) for new assets not yet in IMMS.

Production Unit Calculation

Each

- Charge one production unit per Sign Lighting asset installed, modified, or removed.
- Can be more than one (1) per Work Order.

July 2005

K20070 – GROUP RELAMP**Production Unit:** Each**Purpose**

Each Sign Lighting system asset requires lamp replacement at a set frequency. Use this Activity to capture charges for this relamping at Sign Lighting assets.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4, for the proper frequencies.

- **Do not** use for individual indication replacement (see K20010 – Repair Replace).

Special Requirements

Charge to Roadway (RW).

Production Unit Calculation

Each

- Charge one production unit per Sign Lighting system asset.
- May be more than one per Work Order.

July 2005

K40001 – PROJECT INSPECTION

Production Unit: Each

Purpose

This Activity is for Electrical Maintenance personnel when they are asked to assist with the inspection of Construction and Permit projects on Traffic Signals.

Examples of when to use:

- Producing 'Punch Lists'.
- Verifying construction techniques meet National Electrical Code, Standard Specifications, or Standard Plans.
- Assisting Construction Inspectors on technical issues.

Do not use this Activity for:

- Performing routine PM checks (see K40005).
- Conflict Monitor checks (see K40006).
- Repairs to accident damage (see K40011).

Special Requirements

- Construction or Permit Expenditure Authorization is required.
- Special Designation required on existing asset. The Special Designation auto-populates for the asset selected.
- Use Roadway (RW) and Special Designation of **MERW** for new Traffic Signals that are not in IMMS.

Production Unit Calculation

Each

- Count one for each Traffic Signal Inspected.
- Should always be one (1) per Work Order.

July 2005

K40004 – INVENTORY UPDATE

Production Unit: Hours

Purpose

Use when performing verification of Traffic Signal assets for the purpose of updating the Signals and Lighting Inventory (SLI) in IMMS.

Use when:

- Verifying field inventory.
- Updating IMMS or other records.
- Performing maintenance on other records associated with SLI, IMMS, or agreements.
- Generating reports needed in researching assets.

Special Requirements

- Charge to the Roadway (RW).
- Special Designation of MEINV required.

Production Unit Calculation

Hours

Charge number of hours spent on Traffic Signal asset inventory.

July 2005

K40005 – PM CHECK

Production Unit: Each

Purpose

Each Traffic Signal asset requires a preventative maintenance (PM) check at a set frequency. Use this Activity to capture charges for PM checks at Traffic Signals.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4 for proper frequencies.

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Traffic Signal asset.
- Should always be one (1) per Work Order.

K40006 – CONFLICT MONITOR CHECK

Production Unit: Each

Purpose

Each Traffic Signal asset requires a Conflict Monitor check at a set frequency. Use this Activity to capture charges for Conflict Monitor checks at Traffic Signals.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4 for proper frequencies.

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Traffic Signal asset.
Should always be one (1) per Work Order.

July 2005

K40010 – REPAIR/REPLACE

Production Unit: Each

Purpose

Work performed on Traffic Signals assets for the purpose of restoring them to full service or performing temporary repairs needed. This includes troubleshooting to determine the cause and remedy for repairs.

Work included but not limited to:

- Repairs to field wiring.
- Repairs to traffic signal hardware.
- Repairs to controller cabinet wiring.
- Repairs to detector loops.
- Repairs to service pedestal.

Also use when replacing Traffic Signal components such as:

- Replacement of non-operational Traffic Signal controller.
- Replacement of component(s) in Traffic Signal cabinet.
- Replacement of burnt out signal or pedestrian indication(s).
- Replacement of malfunctioning controller cabinet.
- Replacement of failed detector loops.

Do not use for third party accident damage (see K40011).

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Traffic Signal asset.
- Should always be one (1) per Work Order.

July 2005

K40011 – ACCIDENT DAMAGE

Production Units: Each

Purpose

Work performed on Traffic Signal equipment that has been damaged by errant motorists, vandalism, or any other third party damage. Includes repairs or total replacement of the damaged equipment.

Work included but not limited to:

- Initial visit to clear debris and make safe.
- Set up temporary signal head.
- Set temporary timing.
- Repairs or replacement of signal standard(s).
- Repairs or replacement of signal hardware.
- Repairs or replacement of controller cabinet.
- Repairs or replacement of service pedestal.

The same IMMS Work Order is to be used for all visits to this Traffic Signal for the purpose of making repairs to damage caused by the accident. This will include the initial visit.

Special Requirements

- Must be charged to a Traffic Signal asset.
- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.
- Service Request is required if the responsible party is known or if the asset is shared with a local agency.
- Accident Log is required if the responsible party is known or if the asset is shared with a local agency.

Production Unit Calculation

Each

- Charge one production unit per Traffic Signal asset damaged at the completion of the repairs.
- Should always be one (1) per Work Order
- **Do not** charge number of visits.
- **Do not** charge number of damaged equipment.
- **Do not** charge number of persons responding or making repairs.

July 2005

K40020 – DAY LABOR

Production Units: Each

Purpose

Use when performing work on a Traffic Signal asset with a Day Labor Work Order.

Work included, but not limited to:

- Installation of a new complete Traffic Signal asset.
- Modifications to an existing Traffic Signal asset.
- Installation of additional traffic or pedestrian indications.
- Installation of pedestrian heads and / or push buttons.
- Modification of existing signal head configuration.
- Modification of existing mast arm or standards.
- Complete removal of a Traffic Signal asset.

Special Requirements

- Day Labor Expenditure Authorization required.
- Special Designation required. The Special Designation auto-populates for the asset selected.
- Charge to the Roadway (RW) on new assets not yet in IMMS.
- Special Designation of MERW required on new assets not yet in IMMS.
- Arrival and Departure time is required

Production Unit Calculation

Each

- Charge one production unit per Traffic Signal asset installed, modified, or removed.
- Should always be one (1) per Work Order.

July 2005

K40070 – GROUP RELAMP

Production Unit: Each

Purpose

Each Traffic Signal asset requires total vehicle and pedestrian indication replacement at a set frequency. Use this Activity to capture charges for this relamping at Traffic Signals.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4 for proper frequencies.

Do not use for individual indication replacement (see K40010).

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Traffic Signal asset.
- Should always be one (1) per Work Order.
- **Do not** charge number of lamps replaced.

July 2005

K50001 – PROJECT INSPECTION

Production Unit: Each

Purpose

This Activity is for Electrical Maintenance personnel when they are asked to assist with the inspection of Construction and Permit projects on Flashing Beacons.

Examples of when to use:

- Producing 'Punch Lists'.
- Verifying construction techniques meet National Electrical Code, Standard Specifications, or Standard Plans.
- Assisting Construction Inspectors on technical issues.

Do not use this Activity for:

- Performing routine PM checks (see K50005).
- Repairs to accident damage (see K50011).

Special Requirements

- Construction or Permit Expenditure Authorization is required.
- Special Designation required. The Special Designation auto-populates for the asset selected.
- Use Roadway (RW) and Special Designation of MERW for new Flashing Beacons that are not in IMMS.

Production Unit Calculation

Each

- Count one for each Flashing Beacon Inspected.
- Should always be one (1) per Work Order.

July 2005

K50004 – INVENTORY UPDATE**Production Unit:** Hours**Purpose**

Use when performing verification of Flashing Beacon assets for the purpose of updating the Signals and Lighting Inventory (SLI) in IMMS.

Use when:

- Verifying field inventory.
- Updating IMMS or other records.
- Performing maintenance on other records associated with SLI, IMMS, or agreements.
- Generating reports needed in researching assets.

Special Requirements

- Charge to the Roadway (RW).
- Special Designation of MEINV required.

Production Unit Calculation

Hours

Number of hours spent updating Flashing Beacon assets inventory.

July 2005

K50005 – PM CHECK**Production Unit:** Each**Purpose**

Each Flashing Beacon asset requires a preventative maintenance (PM) check at a set frequency. Use this Activity to capture charges for PM checks at Flashing Beacons.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4 for the proper frequencies.

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Flashing Beacon asset.
- Should always be one (1) per Work Order.

July 2005

K50010 – REPAIR/REPLACE

Production Unit: Each

Purpose

Work performed on Flashing Beacons assets for the purpose of restoring them to full service or performing temporary repairs needed. This includes troubleshooting to determine the cause and remedy for repairs.

Work included but not limited to:

- Repairs to field wiring.
- Repairs to Flashing Beacon hardware.
- Repairs to service pedestal.

Also use when replacing Flashing Beacon components such as:

- Replacement of component(s) in Flashing Beacon cabinet.
- Replacement of burnt out signal indication(s).
- **Do not** use for third party accident damage (see K50011).

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Flashing Beacon asset.
- Should always be one (1) per Work Order.

July 2005

K50011 – ACCIDENT DAMAGE

Production Unit: Each

Purpose

Work performed on Flashing Beacon equipment that has been damaged by errant motorists, vandalism, or any other third party damage to include repairs or total replacement of the damaged equipment.

Work included but not limited to:

- Initial visit to clear debris and make safe.
- Set up temporary signal head.
- Repairs or replacement of standard(s).
- Repairs or replacement of hardware.
- Repairs or replacement of service pedestal.

The same IMMS Work Order is to be used for all visits to this Flashing Beacon for the purpose of making repairs to damage caused by the accident. This will include the initial visit.

Special Requirements

- Must be charged to a Flashing Beacon asset.
- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.
- Service request is required if the responsible party is known or if the asset is shared with a local agency.
- Accident Log is required if the responsible party is known or if the asset is shared with a local agency.

Production Unit Calculation

Each

- Charge one production unit per Flashing Beacon asset damaged at the completion of the repairs.
- Should always be one (1) per Work Order
- **Do not** charge number of visits.
- **Do not** charge number of damaged equipment.
- **Do not** charge number of persons responding or making repairs.

July 2005

K50020 – DAY LABOR

Production Unit: Each

Purpose

Use when performing work on a Flashing Beacon asset with a Day Labor Work Order.

Work included, but not limited to:

- Installation of a new complete Flashing Beacon asset.
- Modifications to an existing Flashing Beacon asset.
- Installation of additional traffic indications.
- Installation of pedestrian heads and / or push buttons.
- Modification of existing signal configuration.
- Modification of existing mast arm or standards.
- Complete removal of a Flashing Beacon asset.

Special Requirements

- Day Labor Expenditure Authorization required.
- Special Designation required. The Special Designation auto-populates for the asset selected.
- Charge to the Roadway (RW) on new assets not yet in IMMS.
- Special Designation of MERW required on new assets not yet in IMMS.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Flashing Beacon asset installed, modified, or removed.
- Should always be one (1) per Work Order.

July 2005

K50070 – GROUP RELAMP

Production Unit: Each

Purpose

Each Flashing Beacon asset requires total vehicle and pedestrian indication replacement at a set frequency. Use this Activity to capture charges for this relamping at Flashing Beacons.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4 for the proper frequencies.

- **Do not use** for individual indication replacement. (see K40010 – Repair Replace).

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Flashing Beacon asset.
- Should always be one (1) per Work Order.
- **Do not** charge number of lamps replaced.

July 2005

K60001 – PROJECT INSPECTION

Production Unit: Each

Purpose

This Activity is for Electrical Maintenance personnel when they are asked to assist with the inspection of Construction and Permit projects on Freeway Metering Signal assets.

Use when:

- Verifying field inventory.
- Updating IMMS or other records.
- Performing maintenance on other records associated with SLI, IMMS, or agreements.
- Generating reports needed in researching assets.

Do not use this Activity for:

- PM checks (see K60005).
- Repairs to accident damage (see K60011).

Special Requirements

- Charge to the Roadway (RW).
- Special Designation of MEINV required.

Production Unit Calculation

Each

- Count one for each Freeway Metering Signals inspected.
- Should always be one (1) per Work Order.

July 2005

K60004 – INVENTORY UPDATE**Production Unit:** Hours**Purpose**

Use when performing verification of Freeway Metering Signal assets for the purpose of updating the Signals and Lighting Inventory (SLI) in IMMS.

Use when:

- Verifying field inventory.
- Updating IMMS or other records.
- Performing maintenance on other records associated with SLI, IMMS, or agreements.
- Generating reports needed in researching assets.

Special Requirements

- Charge to the Roadway (RW).
- Special Designation of MEINV required.

Production Unit Calculation

Hours

Number of hours spent on updating Ramp Meter asset inventory.

July 2005

K60005 – PM CHECK**Production Unit:** Each**Purpose**

Each Freeway Metering Signal asset requires a preventative maintenance (PM) check at a set frequency. Use this Activity to capture charges for PM checks at Freeway Metering Signals.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4 for the proper frequencies.

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Freeway Metering Signal asset.
- Should always be one (1) per Work Order.

July 2005

K60010 – REPAIR/REPLACE

Production Unit: Each

Purpose

Work performed on Freeway Metering Signal assets for the purpose of restoring them to full service, or performing temporary repairs needed. This includes troubleshooting to determine the cause and remedy for repairs.

Work included but not limited to:

- Repairs to field wiring.
- Repairs to Freeway Metering Signal hardware.
- Repairs to controller cabinet wiring.
- Repairs to detector loops.
- Repairs to service pedestal.

Also use when replacing Freeway Metering Signal components such as:

- Replacement of non-operational Freeway Metering Signal controller.
- Replacement of component(s) in Freeway Metering Signal cabinet.
- Replacement of burnt out signal or pedestrian indication(s).
- Replacement of malfunctioning controller cabinet.
- Replacement of failed detector loops.

Do not use for third party accident damage (see K60011).

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Freeway Metering Signal asset.
- Should always be one (1) per Work Order.

July 2005

K60011 – ACCIDENT DAMAGE

Production Unit: Each

Purpose

Work performed on Freeway Metering Signal equipment that has been damaged by errant motorists, vandalism, or any other third party damage to include repairs or total replacement of the damaged equipment.

Work included but not limited to:

- Initial visit to clear debris and make safe.
- Set up temporary signal head.
- Set temporary timing.
- Repairs or replacement of signal standard(s).
- Repairs or replacement of signal hardware.
- Repairs or replacement of controller cabinet.
- Repairs or replacement of service pedestal.

The same IMMS Work Order is to be used for all visits to this Freeway Metering Signal for the purpose of making repairs to damage caused by the accident. This will include the initial visit.

Special Requirements

- Must be charged to a Freeway Metering Signal asset.
- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.
- Service Request is required.
- Accident Log is required if the responsible party is known.

Production Unit Calculation

Each

- Charge one production unit per Freeway Metering Signals asset damaged at the completion of the repairs.
- Should always be one (1) per Work Order
- **Do not** charge number of visits.
- **Do not** charge number of damaged equipment.
- **Do not** charge number of persons responding or making repairs.

July 2005

K60020 – DAY LABOR**Production Unit:** Each**Purpose**

Use when performing work on a Freeway Metering Signal asset with a Day Labor Work Order.

Work included, but not limited to:

- Installation of a new complete Freeway Metering Signal asset.
- Modifications to an existing Freeway Metering Signal asset.
- Installation of additional traffic indications.
- Modification of existing signal head configuration.
- Modification of existing mast arm or standards.
- Complete removal of a Freeway Metering Signal asset.

Special Requirements

- Day Labor Expenditure Authorization required.
- Special Designation required. The Special Designation auto-populates for the asset selected.
- Charge to the Roadway (RW) on new assets not yet in IMMS.
- Special Designation of MERW required on new assets not yet in IMMS.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Ramp Meter installed, modified, or removed.
- Should always be one (1) per Work Order.

July 2005

K60070 – GROUP RELAMP

Production Unit: Each

Purpose

Each Freeway Metering Signals asset requires total vehicle and pedestrian indication replacement at a set frequency. Use this Activity to capture charges for this relamping at Freeway Metering Signals.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4 for the proper frequencies.

- **Do not** use for individual indication replacement. (see K60010 – Repair Replace).

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Arrival and Departure time is required.

Production Unit Calculation

Each

- Charge one production unit per Freeway Metering Signal asset.
- Should always be one (1) per Work Order.
- **Do not** charge number of lamps replaced.

July 2005

K70001 – PROJECT INSPECTION

Production Unit: Each

Purpose

This Activity is for electrical maintenance personnel when they are asked to assist with the inspection of Construction and Permit projects on Traffic Management System (TMS) Field Elements.

Examples of when to use:

- Producing 'Punch Lists'.
- Verifying construction techniques meet National Electrical Code, Standard Specifications, or Standard Plans.
- Assisting Construction Inspectors on technical issues.
- **Do not** use for performing routine PM checks (see K70005).

Special Requirements

- Construction or Permit Expenditure Authorization is required.
- Special Designation is required.
Each TMS asset type has a unique Special Designation which auto-populates for the asset type selected.
See the list of TMS Special Designations following the K9 Family Activity instructions.
- Use Roadway (RW) and Special Designation of MERW for new TMS Field Elements that are not in IMMS.

Production Unit Calculation

Each

- Count one for each TMS Field Element inspected.
- Should always be one (1) per Work Order.

July 2005

K70004 – INVENTORY UPDATE

Production Unit: Hours

Purpose

Use when performing verification of TMS Field Element assets for the purpose of updating the Signals and Lighting Inventory (SLI) in IMMS.

Use when:

- Verifying field inventory.
- Updating IMMS or other records.
- Performing maintenance on other records associated with SLI, IMMS, or agreements.
- Generating reports needed in researching assets.

Special Requirements

- Charge to the Roadway (RW).
- Special Designation of MEINV required.

Production Unit Calculation

Hours

Number of hours spent on updating TMS Field asset inventory.

July 2005

K70005 – PM CHECK

Production Unit: Each

Purpose

Each TMS Field Element asset requires a preventative maintenance (PM) check at a set frequency. Use this Activity to capture charges for PM checks at TMS Field Elements.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4 for the proper frequencies.

Special Requirements

- Special Designation is required.
Each TMS asset type has a unique Special Designation which auto-populates for the asset type selected.
See the list of TMS Special Designations following the K9 Family Activity instructions.

Production Unit Calculation

Each

- Charge one production unit per TMS Field Element asset.
- Should always be one (1) per Work Order.

July 2005

K70010 – REPAIR/REPLACE

Production Unit: Each

Purpose

Work performed on TMS Field Element assets for the purpose of restoring them to full service, or performing temporary repairs needed. This includes troubleshooting to determine the cause and remedy for repairs.

Work included but not limited to:

- Repairs to field wiring.
- Repairs to TMS Field Element hardware.
- Repairs to controller cabinet wiring.
- Repairs to detector loops.
- Repairs to service pedestal.

Also use when replacing TMS Field Element components such as:

- Replacement of non-operational TMS Field Element controller.
 - Replacement of component(s) in TMS Field Element cabinet.
 - Replacement of burnt out lamp(s).
 - Replacement of malfunctioning controller cabinet.
 - Replacement of failed detector loops.
- **Do not** use this Activity for third party accident damage (see K70011).

Special Requirements

- Special Designation is required.
Each TMS asset type has a unique Special Designation which auto-populates for the asset type selected.
See the list of TMS Special Designations following the K9 Family Activity instructions.

Production Unit Calculation

Each

- Charge one production unit per TMS Field Element asset.
- Should always be one (1) per Work Order.

July 2005

K70011 – ACCIDENT DAMAGE

Production Unit: Each

Purpose

Work performed on TMS Field Element equipment that has been damaged by errant motorists, vandalism, or any other third party damage to include repairs or total replacement of the damaged equipment.

Work included but not limited to:

- Initial visit to clear debris and make safe.
- Repairs or replacement of standard(s).
- Repairs or replacement of hardware.
- Repairs or replacement of controller cabinet.
- Repairs or replacement of service pedestal.

The same IMMS Work Order is to be used for all visits to this TMS Field Element for the purpose of making repairs to damage caused by the accident. This will include the initial visit.

Special Requirements

- Special Designation is required.
Each TMS asset type has a unique Special Designation which auto-populates for the asset type selected.
See the list of TMS Special Designations following the K9 Family Activity instructions.
- Must be charged to a TMS Field Element asset.
- Service Request is required if the responsible party is known.
- Accident Log is required if the responsible party is known.

Production Unit Calculation

Each

- Charge one production unit per TMS Field Element asset damaged at the completion of the repairs.
- Should always be one (1) per Work Order
- **Do not** charge number of visits.
- **Do not** charge number of damaged equipment.
- **Do not** charge number of persons responding or making repairs.

July 2005

K70020 – DAY LABOR

Production Unit: Each

Purpose

Use when performing work on a TMS Field Element asset with a Day Labor Work Order.

Work included, but not limited to:

- Installation of a new complete TMS Field Element asset.
- Modifications to an existing TMS Field Element asset.
- Installation of additional TMS components.
- Complete removal of a TMS Field Element asset.

Special Requirements

- Day Labor Expenditure Authorization required.
- Special Designation is required.
Each TMS asset type has a unique Special Designation which auto-populates for the asset type selected.
See the list of TMS Special Designations following the K9 Family Activity instructions.
- Charge to the Roadway (RW) on new assets not yet in IMMS
- Special Designation of MERW required on new assets not yet in IMMS.

Production Unit Calculation

Each

- Charge one production unit per TMS Field Element asset installed, modified, or removed.
- Should always be one (1) per Work Order.

July 2005

K70070 – GROUP RELAMP

Production Unit: Each

Purpose

Each TMS Field Element asset requires total vehicle and pedestrian indication replacement at a set frequency. Use this Activity to capture charges for this relamping at TMS Field Elements.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4 for the proper frequencies.

- **Do not** use for individual indication replacement (see K70010 – Repair Replace).

Special Requirements

- Special Designation is required.
Each TMS asset type has a unique Special Designation which auto-populates for the asset type selected.
See the list of TMS Special Designations following the K9 Family Activity instructions.

Production Unit Calculation

Each

- Charge one production unit per TMS Field Element asset.
- Should always be one (1) per Work Order.
- **Do not** charge number of lamps replaced.

July 2005

K80001 – PROJECT INSPECTION

Production Unit: Each

Purpose

This Activity is for electrical maintenance personnel when they are asked to assist with the inspection of Construction and Permit projects on Traffic Census Systems.

Examples of when to use:

- Producing 'Punch Lists'.
- Verifying construction techniques meet National Electrical Code, Standard Specifications, or Standard Plans.
- Assisting Construction Inspectors on technical issues.

Do not use for :

- Performing routine PM checks (see K80005).
- Repairs to accident damage (see K80011).

Special Requirements

- Construction or Permit Expenditure Authorization is required.
- Special Designation required. The Special Designation auto-populates for the asset selected.
- Special Designations for these assets **MUST** match the format of ETxxx.
- Use Roadway (RW) and Special Designation of MERW for new Traffic Count Systems that are not in IMMS.

Production Unit Calculation

Each

- Count one for each Traffic Census System Inspected.
- Should always be one (1) per Work Order.

July 2005

K80004 – INVENTORY UPDATE

Production Unit: Hours

Purpose

Use when performing verification of Traffic Census System assets for the purpose of updating the Signals and Lighting Inventory (SLI) in IMMS.

Use when:

- Verifying field inventory.
- Updating IMMS or other records.
- Performing maintenance on other records associated with SLI, IMMS, or agreements.
- Generating reports needed in researching assets.

Special Requirements

- Charge to the Roadway (RW).
- Special Designation of MEINV required.

Production Unit Calculation

Hours

Number of hours spent on Traffic Census Systems inventory.

July 2005

K80005 – PM CHECK**Production Unit:** Each**Purpose**

Traffic Census Systems may require preventative maintenance (PM) checks at set frequency. Use this Activity to capture charges for PM checks at Traffic Census Systems.

Refer to Maintenance Manual Volume 1, Chapter K, and Maintenance Manual Volume 2, Chapter 4 for the proper frequencies.

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Special Designations for these assets **MUST** match the format of ETxxx when performing PM checks on one asset.
- When performing PM checks to multiple Traffic Census System assets, work may be charged to the Roadway (RW) with the Special Designation of MERW.

Production Unit Calculation

Each

- Charge one production unit per Traffic Census System asset.
- Should be one (1) per Work Order.
- Can be more than one (1) if charging to Roadway (RW).

July 2005

K80010 – REPAIR/REPLACE

Production Unit: Each

Purpose

Work performed on Traffic Census System assets for the purpose of restoring them to full service, or performing temporary repairs needed. This includes troubleshooting to determine the cause and remedy for repairs.

Work included but not limited to:

- Repairs to field wiring.
- Repairs to Traffic Census System hardware.
- Repairs to controller cabinet wiring.
- Repairs to detector loops.
- Repairs to service pedestal.

Also use when replacing Traffic Census System components such as:

- Replacement of non-operational Traffic Census System controller.
 - Replacement of component(s) in Traffic Census System cabinet.
 - Replacement of malfunctioning controller cabinet.
 - Replacement of failed detector loops.
-
- **Do not** use for third party accident damage (see K80011).

Special Requirements

- Special Designation required. The Special Designation auto-populates for the asset selected.
- Special Designations for these assets **MUST** match the format of ETxxx.

Production Unit Calculation

Each

- Charge one production unit per Traffic Census System asset.
- Should always be one (1) per Work Order.

July 2005

K80011 – ACCIDENT DAMAGE

Production Unit: Each

Purpose

Work performed on Traffic Census System equipment that has been damaged by errant motorists, vandalism, or any other third party damage to include repairs or total replacement of the damaged equipment.

Work included but not limited to:

- Initial visit to clear debris and make safe.
- Repairs or replacement of controller cabinet.
- Repairs or replacement of service pedestal.

The same IMMS Work Order is to be used for all visits to this Traffic Census System for the purpose of making repairs to damage caused by the accident. This will include the initial visit.

Special Requirements

- Must be charged to a Traffic Count System asset.
- Special Designation required. The Special Designation auto-populates for the asset selected.
- Special Designations for these assets **MUST** match the format of ETxxx.
- Service Request is required if the responsible party is known.
- Accident Log is required if the responsible party is known.

Production Unit Calculation

Each

- Charge one production unit per Traffic Census System asset damaged at the completion of the repairs.
- Should always be one (1) per Work Order.
- **Do not** charge number of visits.
- **Do not** charge number of damaged equipment.
- **Do not** charge number of persons responding or making repairs.

July 2005

K80020 – DAY LABOR

Production Unit: Each

Purpose

Use when performing work on a Traffic Census System asset with a Day Labor Work Order.

Work included, but not limited to:

- Installation of a new complete Traffic Census System asset.
- Modifications to an existing Traffic Count System asset.
- Installation of additional detector loops.
- Modification of components in cabinet.
- Complete removal of a Traffic Census System asset.

Special Requirements

- Day Labor Expenditure Authorization required.
- Special Designation required. The Special Designation auto-populates for the asset selected.
- Charge to the Roadway (RW) on new assets not yet in IMMS.
- Special Designation of MERW required on new assets not yet in IMMS.

Production Unit Calculation

Each

- Charge one production unit per Traffic Census System asset installed, modified, or removed.
- Should always be one (1) per Work Order.

July 2005

K90008 – LOCATE FACILITIES

Production Unit: Each

Purpose

This Activity is for Electrical Maintenance personnel when they are asked to locate and mark Caltrans owned underground facilities (conduits, pull boxes, etc.) prior to excavation work being performed in the area by others.

Requests can come from the following, but would not be limited to:

- Construction Branch
 - Permits Branch
 - Other Maintenance crews
 - Regional 'One Call' center
-
- **Do not** use for calling and marking prior to digging as part of a Maintenance function. See note below.

NOTE: Anytime Caltrans Maintenance personnel perform any excavation with power equipment (power auger, power trencher, backhoe, etc.), it is required that the site be marked and a regional 'One Call' center be notified. The time spent on calling and marking the location prior to work being performed by Maintenance crews is a task associated with the specific Activity. Examples of activities that would require power assisted excavation are; Kx0010 (Repair / Replace), Kx0020 (Day Labor), or Kx0011 (accident damage).

Special Requirements

- Charge to the Roadway (RW).
- Special Designation of MERW is required.
- Special Designation of MUSA is required for only those districts involved with the 'One Call' pilot program.

Production Unit Calculation

Each

Number of assets involved in the area of locating.

July 2005

K90100 – TEST NEW EQUIPMENT

Production Unit: Each

Purpose

Work performed when testing equipment for asset installations (Traffic Signals, Changeable Message Signs, Freeway Metering Systems, etc.) that are not yet in IMMS. Most Often this Activity will be used by the three Central Repair Shops, but could be used by the field shops.

Work included but not limited to:

- Testing controller cabinets for new installations.
- Testing components for new installations.

Do not use for:

- Testing of components in conjunction with repairs of faulty equipment (see Kx0010 Repair/Replace).
- Testing equipment on existing assets. Charge Repair/Replace to the specific asset.

Special Requirements

- Charge to Roadway (RW) as asset is not yet in IMMS.
- Expenditure Authorization will also be required when performing testing on components to be installed by Construction or Permits Branch.

Production Unit Calculation

Each

- Charge one production unit per each piece of equipment tested.
- Can be more than one (1).

July 2005

K90110 – CALIBRATION TEST EQUIP

Production Unit: Each

Purpose

Work performed, in Central Repair Shops, when calibrating and / or repairing test equipment used in the repairs or monitoring of field assets.

Work included but not limited to:

- Calibration and/or repair of test meters (VOM, Megger, etc.).
 - Calibration and/or repair of test equipment.
 - Calibration and/or repair of Conflict Monitor testers.
 - Calibration and/or repair of Gastechs, O2 meters, etc.
-
- **Do not** use for calibration in conjunction with repairs to a component associated with a specific asset. Calibration, if needed, should be part of the component repair and charged to the specific asset with the appropriate Activity (see Kxx0010 – Repair/Replace or Kxx0011 – Accident Damage).

Special Requirements

Charge to appropriate Central Repair Shop Facility (FAC) where the calibration is performed.

Production Unit Calculation

Each

- Charge one production unit per each piece of equipment tested.
- Can be more than one (1) per Work Order.

K Family**SPECIAL DESIGNATIONS****MISC**

CODE	DESCRIPTION
MEINV	INVENTORY UPDATE - ELECTRICAL
MERW	ELECTRICAL WORK CHARGED TO RW
MLED01	LED RETROFIT PROGRAM
MBBS	BBS INSTALLATION PROGRAM

K7 SPECIAL DESIGNATIONS

These Special Designations auto-populate when Asset is selected:

CODE	DESCRIPTION	Asset
MCCTV	CLOSED CIRCUIT TV CAMERAS	S
MCMSh	CMS WITH INCANDESCENT LAMPS	H
MCMSN	CMS WITH FLIP DISK OR LED LAMP	N
MEMSI	EXTINGUISHABLE MESSAGE SIGN	I
MHAR	HIGHWAY ADVISORY RADIO SYSTEM	R
MSCAN	WEATHER STATION SYSTEM	X
MVDS	VEHICLE DETECTION SYSTEMS (NOT CENSUS)	V

NOTE:

- The use of MLED01 is for the initial installation of LEDs under the retrofit program only. Any replacement of LEDs due to burnout, damage, or any other failure, is to be charged to the asset Special Designation.
- The use of MBBS is for the initial installation of Battery Backup Systems only. Any replacement of BBS due to damage or any other failure is to be charged to the asset Special Designation.
- Time as trainer or trainee at Electrical Maintenance Training Center should be charged to **W40000** with Special Designation **MEMTC** and appropriate TRAMS Activity Code. See W40000 Activity instructions for details.

July 2006

STRIPING ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
M10001	INSPECTION M FAMILY	VEMI	Vehicle Miles	RW
M10002	COMPLAINT INVESTIG. M FAMILY	EAOC	Each Occurrence	RW
M10003	NIGHT INSPECTION	LIMI	Lineal Miles	RW
M10010	REPAIR/REPLACE	LIMI	Lineal Miles	RW
M10020	DAY LABOR	LIMI	Lineal Miles	RW
M10070	PADDLE MAINT.	EA	Each	RW

MARKINGS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
M20003	NIGHT INSPECTION	LIMI	Lineal Miles	RW
M20010	REPAIR/REPLACE	SQFT	Square Feet	RW
M20020	DAY LABOR	SQFT	Square Feet	RW

PAVEMENT MARKERS

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
M30003	NIGHT INSPECTION	LIMI	Lineal Miles	RW
M30010	REPAIR/REPLACE	LIMI	Lineal Miles	RW
M30020	DAY LABOR	LIMI	Lineal Miles	RW

SIGNS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
M40003	NIGHT INSPECTION	LIMI	Lineal Miles	RW
M40010	REPAIR/REPLACE	EA	Each	RW
M40020	DAY LABOR	EA	Each	RW
M40100	SIGN FABRICATION	EA	Each	FAC,RW

July 2006

SIGN STRUCTURES ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
M41010	REPAIR/REPLACE	EA	Each	RW
M41020	DAY LABOR	EA	Each	RW
M41021	INSTL/RMV GRAFI DTRNT	EA	Each	RW

ROADSIDE DELINEATORS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
M50010	REPAIR/REPLACE	EA	Each	RW
M50020	DAY LABOR	EA	Each	RW

GUARDRAILS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
M60010	REPAIR/REPLACE (RAIL ONLY)	FT	Feet	RW
M60020	DAY LABOR (RAIL ONLY)	FT	Feet	RW
M61010	REPR/REPLC (ENDTRTMNT)	EA	Each	RW
M61020	DAY LABOR (END TRTMNT)	EA	Each	RW

BARRIER ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
M70010	REPAIR/REPLACE	FT	Feet	RW

ATTENUATOR ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
M80010	REPAIR/REPLACE	EA	Each	RW

MISCELLANEOUS

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
M90000	EMERGENCY TRAFFIC CONTROL	EAOC	Each Occurrence	BR,RW
M90004	INVENTORY UPDATE	NONE	None	RW
M90100	TRAFFIC CNTRL - WORK FOR OTHERS	EAOC	Each Occurrence	BR,RW

OUT-OF-CONTROL VEHICLE RAMP ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
M91011	ELECTRICAL / MECH	EA	Each	RW
M91013	REPAIR/REPL WTR TRTMNT	EA	Each	RW
M91014	SMOOTH/SCARIFY	EA	Each	RW

July 2006

M10001 – INSPECTION M FAMILY

Production Unit: Vehicle miles

Purpose

This Activity is for the periodic inspections of “M” Family assets and elements to determine the condition of the inventory.

Do not use for formal annual night inspections. See Mx0003 for reporting of formal night inspections.

Special Requirements

None

Production Unit Calculation

Vehicle miles driven inspecting. Do not charge travel time to and from inspected area as production. Charge travel time to support on the Additional tab.

July 2006

M10002 - COMPLAINT INVESTIGATION M FAMILY

Production Unit: Each occurrence

Purpose

Use when responding to "M" Family complaints whether it is a Caltrans asset, an asset not maintained by Caltrans, or asset that does not exist.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed. When applicable, follow the damage reporting process.

Special Requirements

None

Production Unit Calculation

Each occurrence

- Count one each per location responding to.
- Can be more than one (1) per Work Order.

M10003 – NIGHT INSPECTION STRIPING

Production Unit: Lineal miles

Purpose

The purpose is to perform **formal night inspections** as detailed in the Maintenance Manual Vol. I, Chapter M, on all striping (M1).

Do not use for inspections in response to complaint (internal or external).

Special Requirements

To be conducted annually as directed in the Maintenance Manual, Vol. I.

Production Unit Calculation

Lineal miles

July 2006

M10010 – REPAIR/REPLACE STRIPING

Production Unit: Lineal miles

Purpose

Work performed on pavement delineation for the purpose of restoring to full service of the existing patterns.

Work included but not limited to:

- Removal of existing delineation material when planning to replace existing pattern.
- Layout of pattern for the purpose of maintaining existing pattern.
- Placement of delineation material to maintain existing pattern.
- Changing materials (i.e. replacing paint with thermoplastic) with the existing pattern.
- Grinding for placement of recessed pavement delineation to existing pattern.
- Includes necessary traffic control.

Do not use this Activity to change delineation patterns (see M10020).

Special Requirements

- Report all delineation activity in the job to one Work Order. Note in Work Order Comments the type and quantity of stripes worked on.

Production Unit Calculation

Lineal miles

- Per stripe, round to the nearest hundredth (1/100) mile.
- A Two-Way No Pass stripe of one mile equals one (1) lineal stripe mile.
- Removal and replacement counts as one.
- Replacement without removal counts as one.

July 2006

M10020 - DAY LABOR STRIPING

Production Unit: Lineal miles

Purpose

Use when performing work on pavement delineation with a Day Labor Work Order (IO).

Work included, but not limited to:

- Removal of existing pavement delineation for the purpose of changing patterns.
- Layout of new pattern in preparation of pattern change.
- Placement of pavement delineation for the purpose of changing patterns.
- Grinding for the initial placement of recessed pavement delineation.
- Necessary traffic control.

Special Requirements

- Day Labor Expenditure Authorization is required.
- Report all delineation activity in the job to one Work Order.
- Note in Work Order Comments the type and quantity of stripes worked.

Production Unit Calculation

Lineal miles

- Per stripe, round to the nearest hundredth (1/100) mile.
- A Two-Way No Pass stripe of one mile equals one (1) lineal stripe mile.
- Removal and replacement count as one.
- Replacement without removal counts as one.

July 2006

M10070 – PADDLE MAINTENANCE STRIPING

Production Unit: Each

Purpose

Repair or replace paddle markers that are used to delineate or provide a reference point at striping detail change.

Special Requirements

Paddle markers used for this purpose shall not be reflectorized.

Production Unit Calculation

Each

M20003 – NIGHT INSPECTION MARKINGS

Production Unit: Lineal miles

Purpose

The purpose is to perform **formal night inspections** as detailed in the Maintenance Manual Vol. I, Chapter M.

Do not use for inspections in response to complaint (internal or external).

Special Requirements

To be conducted annually as directed in the Maintenance Manual, Vol. I, Chapter M.

Production Unit Calculation

Lineal miles

July 2006

M20010 – REPAIR/REPLACE MARKINGS

Production Unit: Square feet

Purpose

Work performed on pavement markings for the purpose of restoring to full service of the existing markings.

Work includes but not limited to:

- Removal of existing marking material when planning to replace existing marking.
- Layout of markings for the purpose of maintaining existing markings.
- Placement of marking material to maintain existing markings.
- Changing materials (i.e. replacing paint with thermoplastic) with the existing markings.
- Grinding for the initial placement of recessed pavement markings.
- Necessary traffic control.

Do not use for the change of pavement markings (see M20020).

Special Requirements

- Report all marking activity in the job to one Work Order.
- Note in Work Order Comments each type and quantity of markings worked on.

Production Unit Calculation

Square feet

- Removal and replacement count as one.
- Replacement without removal counts as one.

July 2006

M20020 – DAY LABOR MARKINGS

Production Unit: Square feet

Purpose

Use when performing work on pavement markings with a Day Labor Work Order.

Work includes, but not limited to:

- Removal of existing pavement markings for the purpose of changing patterns.
- Layout of new pattern in preparation of pattern change.
- Placement of pavement marking for the purpose of changing patterns.
- Necessary traffic control.

Special Requirements

- Day Labor Expenditure Authorization is required.
- Report all pavement marking activity in the job to one Work Order.
- Note in Work Order Comments each type and quantity of markings worked on.

Production Unit Calculation

Square feet

- Removal and replacement count as one.
- Replacement without removal counts as one.

July 2006

M30003 – NIGHT INSPECTION PAVEMENT MARKERS

Production Unit: Lineal miles

Purpose

The purpose is to perform **formal night inspections** as detailed in the Maintenance Manual Vol. I, Chapter M.

Do not use for response to complaint (internal or external).

Special Requirements

To be conducted annually as directed in the Maintenance Manual, Vol. I, Chapter M.

Production Unit Calculation

Lineal miles

July 2006

M30010 – REPAIR/REPLACE PAVEMENT MARKERS

Production Unit: Lineal miles

Purpose

Work performed on pavement markers for the purpose of restoring to full service of the existing patterns. This Activity is for reflective, non-reflective, and recessed pavement markers.

Work includes, but not limited to:

- Removal of existing pavement markers when planning to replace existing pattern.
- Layout of pattern for the purpose of maintaining existing pattern.
- Placement of pavement markers to maintain existing pattern.
- Grinding for placement of recessed pavement markers to existing pattern.
- Necessary traffic control.

Do not use this Activity to change delineation patterns (see M30020).

Special Requirements

- Report all pavement marker activity in the job to one Work Order.
- Note in Work Order Comments type and quantity of marker patterns worked on, including Standard Plan Detail number.

Production Unit Calculation

Lineal miles

July 2006

M30020 – DAY LABOR PAVEMENT MARKERS

Production Unit: Lineal miles

Purpose

Use when performing work on pavement markers with a Day Labor Work Order (IO). This Activity is to be used when changing pavement marker patterns or installing new pavement marker patterns. This Activity is for reflective, non-reflective, and recessed pavement markers.

Work includes, but not limited to:

- Removal of existing pavement markers for the purpose of changing patterns.
- Layout of new pattern in preparation of pattern change.
- Placement of pavement markers for the purpose of changing patterns.
- Grinding for the initial placement of recessed pavement markers.
- Necessary traffic control.

Special Requirements

- Day Labor Expenditure Authorization is required.
- Report all pavement marker activity in the job to one Work Order.
- Note in Work Order Comments the Standard Plan Detail number for marker patterns worked on.

Production Unit Calculation

Lineal miles

July 2006

M40003 – NIGHT INSPECTION SIGNS

Production Unit: Lineal miles

Purpose

The purpose is to perform **formal night inspections** as detailed in the Maintenance Manual Vol. I, Chapter M on all permanent signs including warning, regulatory, and guide.

Do not use for inspections in response to complaint (internal or external).

Special Requirements

To be conducted annually as directed in the Maintenance Manual, Vol. I, Chapter M.

Production Unit Calculation

Lineal miles

July 2006

M40010 – REPAIR/REPLACE SIGNS

Production Unit: Each

Purpose

Work performed on signs for the purpose of restoring to full service of the sign and message.

Work included but not limited to:

- Initial visit to determine nature of work.
- Setup temporary signs if needed.
- Call USA prior to using power tools to install sign supports.
- Removal and installation of sign supports.
- Repair or replacement of signs.
- Cleaning of signs to remove accumulation of dirt, etc. on sign face. (Charge Graffiti removal to D60000).
- Includes necessary traffic control.

Do not use:

- For new sign installation, removal of obsolete signs, or modification of sign messages as a result of a Sign Installation Order (see M40020).
- For Day Labor work (see M40020).

July 2006

M40010 – REPAIR/REPLACE SIGNS

CONTINUED FROM PREVIOUS PAGE

Special Requirements

- Report all sign maintenance activity in the job to one Work Order unless the use of a Special Designation is required.
- Note in Work Order Comments USA ticket numbers by date called.
- Note in Work Order Comments type (Examples: R-1, G-84, W-2, etc), quantity, and specific location of signs worked on as part of Work Order.
(Examples: R-1, G-84, W-2, etc).

Special Designations:

The use of Special Designations is limited to five cases:

- **MEMDUI** – any work on signs associated with the DUI Memorial Program.
- **MMB** – any work on signs associated with the Mission Bell program.
- **YWLOGO** – any work on signs associated with the freeway LOGO program.
- **YWTODS** – any work on signs covered by the Tourist Oriented Destination Sign (TODS) program.
- **MADOPT** – any work on Adopt-A-Highway signs.

When working on signs that fall into any of these situations, all work for these signs shall be captured in separate Work Orders using the appropriate Special Designation.

Production Unit Calculation

Each sign

- Charge one production unit per sign repaired or replaced.
- May have more than one production unit per Work Order.
- Removal and replacement count as one.
- **Do not** count temporary signs.
- **Do not** count number of sign posts.
- **Do not** count number of calls to USA.

July 2006

M40020 - DAY LABOR SIGNS

Production Unit: Each

Purpose

Use when installing, removing, or modifying sign assets with a Day Labor Work Order (Sign Installation Order – SIO).

Work includes, but not limited to:

- Initial visit to determine nature of work.
- Setup temporary signs if needed.
- Call USA prior to using power tools to install sign supports.
- Removal and installation of sign supports.
- Installation of new signs.
- Modifying sign message, through overlay or sign panel replacement.
- Fabrication of signs.
- Necessary traffic control.

July 2006

M40020 – DAY LABOR SIGNS

CONTINUED FROM PREVIOUS PAGE

Special Requirements

- Note in Work Order Comments USA ticket numbers by date called.
- Day Labor Work Order (Sign Installation Order - SIO) required.
- Day Labor Expenditure Authorization required.

Special Designations:

The use of Special Designations is limited to five cases:

MEMDUI – any work on signs associated with the DUI Memorial Program.

MMB – any work on signs associated with the Mission Bell program.

YWLOGO – any work on signs associated with the freeway LOGO program.

YWTODS – any work on signs covered by the Tourist Oriented Destination Sign program.

MADOPT – any work on Adopt-A-Highway signs.

When working on signs that fall into any of these situations, all work for these signs shall be captured in separate Work Orders using the appropriate Special Designation.

Production Unit Calculation

Each

- Charge one production unit per sign installed, removed or modified as specified on the SIO.
- **Do not** count temporary signs.
- **Do not** count number of sign posts.
- **Do not** count number of calls to USA.
- **Do not** charge number of visits.

July 2006

M40100 – SIGN FABRICATION SIGNS

Production Unit: Each

Purpose

Use when Maintenance forces fabricate signs for emergencies or special requirements.

Work includes, but not limited to:

- Design and layout of sign.
- Cleaning of substrate prior to application of sheeting.
- Application of sheeting to substrate.
- Application of legend and borders.
- Application of graffiti protection such as film or spray-on coating.

Special Requirements

Special Designations:

The use of Special Designations is limited to five cases:

MEMDUI – any work on signs associated with the DUI Memorial program.

MMB – any work on signs associated with the Mission Bell program.

YWLOGO – any work on signs associated with the freeway LOGO program.

YWTODS – any work on signs covered by the Tourist Oriented Destination Sign program.

MADOPT – any work on Adopt-A-Highway signs.

When working on signs that fall into any of these situations, all work for these signs shall be captured in separate Work Orders using the appropriate Special Designation.

Production Unit Calculation

Each sign

July 2006

M41010 – REPAIR/REPLACE SIGN STRUCTURES

Production Unit: Each

Purpose

Work performed on overhead sign structures for the purpose of restoring to full service of the structure.

Work included but not limited to:

- Initial visit to determine nature of work.
- Setup temporary signs if needed.
- Call USA prior to using power tools to install sign supports.
- Removal and installation of sign supports.
- Repairs to structures due to age, weathering, and exposure.
- Painting to cover up repairs on small areas.
- Necessary traffic control.

Do not use this Activity to repair/replace sign face (see M40010), install new signs, remove obsolete signs, or modify sign messages as a result of a Sign Installation Order (see M40020).

Special Requirements

- Report all sign structure maintenance activity in the job to one Work Order.
- Note in Work Order Comments USA ticket numbers by date called.

Production Unit Calculation

Each sign

- Charge one production unit per sign structured repaired or replaced.
- May have more than one production unit per Work Order.
- Removal and replacement count as one.
- **Do not** count temporary signs.
- **Do not** count number of signposts.
- **Do not** count number of calls to USA.

July 2006

M41020 – DAY LABOR SIGN STRUCTURES

Production Unit: Each

Purpose

Work performed to install or remove overhead sign structures. Caltrans Maintenance forces typically do not do this since work most likely exceeds Day Labor limits.

Work includes, but not limited to:

- Initial visit to determine nature of work.
- Setup temporary signs if needed.
- Call USA prior to using power tools to install sign structure foundations.
- Removal and installation of sign supports.
- Repairs to structures due to age, weathering, and exposure.
- Painting to cover up repairs on small areas.
- Necessary traffic control.

Do not use this Activity to repair/replace sign face (see M40010), install new signs, remove obsolete signs, or modify sign messages as a result of a Sign Installation Order (see M40020).

Special Requirements

- Report all sign structure activity in the job to one Work Order.
- Note in Work Order Comments USA ticket numbers by date called.

Production Unit Calculation

Each sign

- Charge one production unit per sign installed or removed.
- May have more than one production unit per Work Order.
- Removal and replacement count as one.
- **Do not** count number of sign panels.
- **Do not** count number of calls to USA.

July 2006

M41021 – INSTALL/REMOVE GRAFFITI DETERENT SIGN STRUCTURES

Production Unit: Each

Purpose

Use when working on graffiti deterrents such as Nu-Gard, razor ribbon, cobra-hoods, or any other device installed on a structure to prevent unauthorized access.

Work includes, but not limited to:

- Installation of device.
- Removal of device.
- Traffic control.
- Structure preparation prior to installation.
- Structure repairs after removal.
- Necessary traffic control.

Special Requirements

None

Production Unit Calculation

Each

- Count one production unit for each device installed or removed.
- Removal with replacement counts as one.

July 2006

M50010 – REPAIR/REPLACE ROADSIDE DELINEATORS

Production Unit: Each

Purpose

Work performed on Roadside Delineators for the purpose of restoring to full service.

Work included but not limited to:

- Initial visit to determine nature of work.
- Call USA prior to using power tools to install Roadside Delineators.
- Removal and installation of Roadside Delineators.
- Repair or replacement of reflectorized sheeting.
- Necessary traffic control.

Do not use this Activity to install new delineators, remove obsolete delineators, as a result of an Installation Order (see M50020).

Special Requirements

Note in Work Order Comments USA ticket numbers by date called.

Production Unit Calculation

Each

Removal and replacement at the same location count as one.

July 2006

M50020 - DAY LABOR ROADSIDE DELINEATORS

Production Unit: Each

Purpose

Use when installing, removing, or modifying Roadside Delineators with a Day Labor Work Order (Installation Order – IO).

Work includes, but not limited to:

- Initial visit to determine nature of work.
- Call USA prior to using power tools to install delineators.
- Removal and installation of delineators per Installation Order.
- Necessary traffic control.

Special Requirements

- Day Labor Work Order (Installation Order - IO) required.
- Day Labor Expenditure Authorization required.
- Note in Work Order Comments USA ticket numbers by date called.

Production Unit Calculation

Each

Charge one production unit per delineator installed or removed, as specified on the IO.

July 2006

M60010 – REPAIR/REPLACE GUARDRAILS

Production Unit: Lineal feet

Purpose

Work performed on guardrail for the purpose of restoring to full service the guardrail. This Activity is for all types of guardrail, metal beam, concrete, or other.

Work includes, but not limited to:

- Initial visit to determine nature of work.
- Call USA prior to using power tools to install rail posts.
- Removal and installation of rail posts.
- Raising guardrail to conform to pavement grade.
- Checking/tightening guard rail bolts/hardware.
- Setting of forms for concrete guardrail repair.
- Necessary traffic control.

Do not use this Activity for:

- The repair of end treatments or transitions (see M61010).
- Installation of new runs of guardrail or upgrade end treatments as a result of a Day Labor work request (see M60020 or M61020).

Special Requirements

- Report all guardrail maintenance activity in the job to one Work Order.
- Note in Work Order Comments USA ticket numbers by date called.

Production Unit Calculation

Lineal feet

- Charge one production unit per ft of guardrail repaired or replaced.
- May have more than one production unit per Work Order.
- Removal and replacement count as one.
- **Do not** count number of rails.
- **Do not** count number of rail posts.
- **Do not** count number of calls to USA.

July 2006

M60020 - DAY LABOR GUARDRAILS

Production Unit: Lineal feet

Purpose

Use when installing, removing, or modifying guardrail assets with a Day Labor Work Order.

Work includes, but not limited to:

- Initial visit to determine nature of work.
- Marking location of guardrail.
- Call USA prior to using power tools to install rail posts.
- Removal and installation of rail posts.
- Raising guardrail to conform to pavement grade.
- Setting of forms for concrete guardrail installation.
- Necessary traffic control.

Do not use for guardrail end treatment upgrades/installation (see M61020).

Special Requirements

- Day Labor Work Order required.
- Day Labor Expenditure Authorization required.
- Note in Work Order Comments USA ticket numbers by date called.

Production Unit Calculation

Lineal feet

- Charge one production unit per ft of guardrail repaired or replaced.
- May have more than one production unit per Work Order.
- Removal and replacement count as one.

- **Do not** count number of rails.
- **Do not** count number of rail posts.
- **Do not** count number of calls to USA.
- **Do not** charge number of visits.

July 2006

M61010 – REPAIR/REPLACE GUARDRAIL END TREATMENTS

Production Unit: Each

Purpose

Work performed on end treatments for the purpose of restoring the guardrail end treatments to full service. This Activity is for end treatments for all guardrail installations including metal beam, concrete, and other types. Repairs on transitions from guardrail to fixed objects are also included in this Activity.

Work includes but not limited to:

- Initial visit to determine nature of work.
- Call USA prior to using power tools to install posts.
- Removal and installation of rail posts.
- Raising end treatment to conform to pavement grade.
- Checking/tightening bolts/hardware.
- Necessary traffic control.

Do not use this Activity to install new end treatments, or upgrade end treatments as a result of a Day Labor work request (see M61020).

Special Requirements

- Report all guardrail end treatment maintenance activity in the job to one Work Order.
- Note in Work Order Comments USA ticket numbers by date called.

Production Unit Calculation

Each

- Charge one production unit per end treatment repaired or replaced.
- May have more than one production unit per Work Order.
- Removal and replacement count as one.
- **Do not** count number of rails.
- **Do not** count number of rail posts.
- **Do not** count number of calls to USA.

July 2006

M61020 – DAY LABOR GUARDRAIL END TREATMENTS

Production Unit: Each

Purpose

This is for capital work performed by Maintenance crews. Use when installing, removing, or modifying guardrail end treatment(s) with a Day Labor Work Order. Reasons for capital work include upgrading a damaged/unserviceable end treatment to the current standard. Day Labor on transitions to fixed objects is also included in this Activity.

Work includes, but not limited to:

- Initial visit to determine nature of work.
- Marking location of guardrail.
- Call USA prior to using power tools to install posts.
- Removal and installation of posts.
- Removal and/or installation of complete end treatments.
- Necessary traffic control.

Special Requirements

- Day Labor Work Order required.
- Day Labor Expenditure Authorization required.
- Note in Work Order Comments USA ticket numbers by date called.

Production Unit Calculation

Each

- Charge one production unit per end treatment repaired or replaced.
- May have more than one production unit per Work Order.
- Removal and replacement count as one.
- **Do not** count number of rails.
- **Do not** count number of rail posts.
- **Do not** count number of calls to USA.
- **Do not** charge number of visits.

July 2006

M70010 – REPAIR/REPLACE BARRIER

Production Unit: Lineal feet

Purpose

Work performed on barrier for the purpose of restoring to full service the barrier. This Activity is for all types of barrier including metal beam, concrete, thrie beam, and other types.

Work includes, but not limited to:

- Initial visit to determine nature of work.
- Setup temporary signs if needed.
- Call USA prior to using power tools to install posts.
- Removal and installation of posts.
- Raising barrier to conform to pavement grade.
- Checking/tightening hardware.
- Setting of forms for concrete repair.
- Necessary traffic control.

Do not use this Activity to modify existing or install new runs of barrier (see M70020).

Special Requirements

- These **Project Codes** should be used to define the types of barrier being worked on or installed in IMMS. The definition of each code is as follows:

METAL B	For use with any Metal “W” Beam Barrier related work <u>except Thrie Beam</u> .
THRIE B	For use with any Thrie Beam Barrier related work.
K-RAIL	For use with any K-Rail Barrier related work.
CONCRETE	For use with any Concrete Barrier related work.
CABLE B	For use with any Cable Barrier related work.

- Report all barrier maintenance activity in the job to one Work Order.
- Note in Work Order Comments USA ticket numbers by date called.

Production Unit Calculation

Lineal feet

- Charge one production unit per ft of barrier repaired or replaced.
- May have more than one production unit per Work Order.
- Removal and replacement count as one.
- **Do not** count number of rails.
- **Do not** count number of rail posts.
- **Do not** count number of calls to USA.

July 2006

M80010 – REPAIR/REPLACE ATTENUATOR

Production Unit: Each

Purpose

Work performed on attenuators for the purpose of restoring to full service.

Work included but not limited to:

- Initial visit to determine nature of work.
- Call USA prior to installation if sub-surface groundwork is involved.
- Removal and replacement of complete attenuator systems.
- Removal and replacement of sacrificial components of attenuator systems.
- Checking/tightening bolts/hardware.
- Includes necessary traffic control.

Do not use this Activity to install new attenuators, or upgrade attenuators as a result of a Day Labor work request (see M80020).

Special Requirements

- Report all attenuator maintenance activity in the job to one Work Order.
- Note in Work Order Comments USA ticket numbers by date called.

Production Unit Calculation

Each

- Charge one production unit per attenuator repaired or replaced.
- May have more than one production unit per Work Order.
- Removal and replacement count as one.
- **Do not** count number of calls to USA.

July 2006

M90000 – EMERGENCY TRAFFIC CONTROL MISCELLANEOUS

Production Unit: Each occurrence

Purpose

Emergency traffic control for incidents such as accidents, dust storms, fog, smoke, fire and there is no damage to State highway or facilities.

See “S” Family for charging traffic control to work activity listed below:

- Clearing road of sand and debris.
- Major slides and slipouts.
- Blasting
- Erosion control
- Rock scaling

Special Requirements

Even when there is no damage to State highway, traffic control costs may be recoverable.

Production Unit Calculation

Each occurrence

July 2006

M90004 – INVENTORY UPDATE**Production Unit:** None**Purpose**

This Activity is used when performing asset inventory update.

Includes:

- Reviewing plans and other documentation used for inventory purposes.
- Performing field reviews to validate, or count, measure, and document inventory changes.
- Compiling and entering inventory into IMMS.

For direction regarding the process and roles and responsibilities for inventory update, contact your District IMMS Coordinator.

Special Requirements

None

Production Unit Calculation

None

July 2006

M90100 – TRAFFIC CONTROL WORK FOR OTHER MISCELLANEOUS

Production Unit: Each occurrence

Purpose

Use this Activity when performing traffic control for other Divisions or contract work.

Do not use this Activity for work which is funded by Maintenance dollars.

Special Requirements

A valid Expenditure Authorization, FA (State or Federal), and TRAMS Activity Code is required and must be provided by the office requesting the work.

Production Unit Calculation

Each occurrence

July 2006

M91011 – ELECTRICAL / MECH ESCAPE RAMP

Production Unit: Each

Purpose

Work performed on escape ramps for the maintenance and repair of electrical systems such as lighting.

Special Requirements

- Special Designation required.
See list of Escape Ramp Special Designations following the M9 Activities.
- To insure accurate reporting, always use the appropriate M91xxx Activity and route and post mile of escape ramp.
- Report all escape ramp maintenance activity in the job to one Work Order.

Production Unit Calculation

Each

- Charge one production unit per escape ramp repaired or replaced.
- May not have more than one production unit per Work Order.

July 2006

M91013 – REPAIR/REPLACE WATER TREATMENT ESCAPE RAMP

Production Unit: Each

Purpose

Work performed on escape ramps for the maintenance and repair of water treatment systems.

Work under this Activity includes, but not limited to:

- Working on pumps, filters, water storage, pipes, etc.
- Replacing chemicals

Special Requirements

- Special Designation required.
See list of Escape Ramp Special Designations following the M9 Activities.
- To insure accurate reporting, always use the appropriate M91xxx Activity and route and post mile of escape ramp.
- Report all escape ramp maintenance activity in the job to one Work Order.

Production Unit Calculation

Each

- Charge one production unit per escape ramp water treatment system repaired or replaced.
- May not have more than one production unit per Work Order.

July 2006

M91014 – SMOOTH/SCARIFY ESCAPE RAMP

Production Unit: Each

Purpose

Work performed on escape ramps to smooth/scarify arrestor bed. The frequency is detailed in the Maintenance Manual, Vol. 1.

Special Requirements

- Special Designation required.
See list of Escape Ramp Special Designations following the M9 Activities.
- To insure accurate reporting, always use the appropriate M91xxx Activity and route and post mile of escape ramp.

Production Unit Calculation

Each

- Charge one production unit per escape ramp smoothed/scarified.
- May not have more than one production unit per Work Order.

July 2006

M FAMILY
ESCAPE RAMP
SPECIAL DESIGNATIONS

CODE	SD DESCRIPTION
MOCVR01	ESCAPE RAMP 02-SIS-005-058.1-NB, COLLIER R/R
MOCVR02	ESCAPE RAMP 02-SHA-299-058.3-WB, MONTGOMERY CRK
MOCVR03	ESCAPE RAMP 03-PLA-080-050.0-WB, WHITMORE
MOCVR04	ESCAPE RAMP 03-PLA-080-046.0-WB. CRYSTAL SPRINGS
MOCVR05	ESCAPE RAMP 06-KER-005-008.1-NB, WHEELER RIDGE
MOCVR06	ESCAPE RAMP 07-LA-002-025.0-WB, NEAR RT 210, MEDIAN
MOCVR07	ESCAPE RAMP 09-KER-178-087.7-EB, NEAR RT 14
MOCVR09	ESCAPE RAMP 11-IMP-008-003.8EB, MR. SPRINGS GRADE
MOCVR10	ESCAPE RAMP 06-KER-033-005.6, NB, GROCER GRADE
MOCVR11	ESCAPE RAMP 06-KER-033-009.2, NB, GROCER GRADE
MOCVR12	ESCAPE RAMP 02-TRI-299-047.1, WB, OREGON MT.
MOCVR13	ESCAPE RAMP 08-SBD-015-023.4, SB, CAJON PASS
MOCVR14	ESCAPE RAMP 08-SBD-015-175.0-, NB, WHEATON SPRINGS
MOCVR15	ESCAPE RAMP 01-HUM-101-127.4 MI –SB REDWOOD BYPASS
MOCVR16	ESCAPE RAMP – 01-HUM-101-129.3 MI SB-REDWOOD BYPASS

July 2005

SNOW ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
R10000	SNOW REMOVAL	VEMI	Vehicle Miles	RW
R10010	SNOW HAULING	HR	Hours	RW

SAND AND SALT ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
R20000	COVER SNOW & ICE ON PAVEMENT	VEMI	Vehicle Miles	RW
R20009	SAND/SALT MATERIAL HANDLING	NONE	None	FAC,RW
R20010	SNOW AND ICE ABRASIVES	TN	Tons	RW
R20100	APPLY ANTI-ICER	VEMI	Vehicle Miles	FAC,RW

SNOW POLES ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
R30009	USA Snow Poles Signs and Markings	EAOC	Each Occurrence	RW
R30010	INSTALL, REPAIR & REPLACE, REMOVAL ,SNOW POLES/SIGNS	EA	Each	RW

CHAIN CONTROL ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
R40000	CHAIN CONTROL	HR	Hours	RW

SUPPORT PERSONNEL ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
R50000	SUPPORT PERSONNEL - ICE/SNOW	NONE	None	RW

MISCELLANEOUS ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
R90000	ADMIN TIME OFF Short Shft Chng	EAOC	Each	RW
R90100	AVALANCHE CONTROL	EAOC	Each	RW

July 2005

R10000 – SNOW REMOVAL SNOW

Production Unit: Vehicle miles

Purpose

Snow is to be removed from the traveled way and adjacent shoulders including on and off ramps. All work shall be done in accordance with the snow removal policy currently in effect, according to the designated Snow Route Classification, and paying particular attention to the Best Management Practices as outlined in the Storm Water Quality Handbook.

Includes all snow plowing using truck, grader mounted, and loader mounted or rotary plows. Also includes plowing to increase snow storage capacity, opening roads closed during winter season, and operation of fuel trucks and other types of snow support equipment.

Special Requirements

Snow removal within Snow Parks must be reported to Y90000 along with the appropriate Expenditure Authorization and Special Designation.

Production Unit Calculation

Vehicle miles

Report odometer miles within work area. Travel to and from work area should be reported as support on the Additional tab.

July 2005

R10010 – SNOW HAULING SNOW

Production Unit: Hours

Purpose

Removal of snow from any temporary storage (includes the median in urban areas) to a designated long-term storage or melting area.

Snow and ice hauling required for REGULATORY COMPLIANCE shall be charged to F40210.

Special Requirements

None

Production Unit Calculation

Hours

R20000 – COVER SNOW & ICE ON PAVEMENT ON PAVEMENT

Production Unit: Vehicle miles

Purpose

Improve traction of pavement surface by application of abrasives or abrasives and deicers.

Do not use for application of solid or liquid materials as an anti-icer (see R20100).

Special Requirements

None

Production Unit Calculation

Vehicle miles

Report odometer miles within work area. Travel to and from work area should be reported as support on the Additional tab.

July 2005

R20009 – SAND/SALT MATERIAL HANDLING ABRASIVES AND SALT

Production Unit: None

Purpose

Used to capture time spent in Maintenance Stations or at abrasive and salt storage sheds stockpiling or arranging materials. Includes receiving deliveries of material, whether delivered by vendor or by State equipment.

Includes time spent mixing solutions of salt and water to make brine.

Special Requirements

None

Production Unit Calculation

None

R20010 – SNOW AND ICE ABRASIVES REMOVAL SAND AND SALT

Production Unit: Tons

Purpose

In some areas, abrasives are swept up and hauled away as soon as possible after the storm, or after the storm season is over.

Special Requirements

In some areas, this is a requirement imposed by terms of the stormwater permit issued to Caltrans. Maintenance Supervisors should be familiar with any special Caltrans or regulatory agency reporting requirements within their area of responsibility.

Production Unit Calculation

Tons

July 2005

R20100 – Apply Anti-Icer

Production Unit: Vehicle miles

Purpose

Application of solids or liquids to pavement before snow sticks or frost or ice forms. Solids or liquids used can be, but are not limited to: salt, enhanced salt, magnesium chloride solutions, or salt brine.

Special Requirements

None

Production Unit Calculation

Vehicle miles

Report odometer miles within work area. Travel to and from work area should be reported as support on the Additional tab.

R30009 – USA SNOW POLES SIGNS AND MARKINGS

Production Unit: Each occurrence

Purpose

Underground Service Alert (USA) must be notified in advance when digging, boring, trenching, etc. deeper than 6 inches. Charge to this Activity for time expended obtaining USA clearance.

Special Requirements

None

Production Unit Calculation

Each occurrence

July 2005

R30010 – INSTALL, REPAIR, REPLACE & REMOVAL SNOW POLES & SIGNS

Production Unit: Each

Purpose

Installation, maintenance, replacement, and removal of all special fixed hardware used in snow and ice removal. Does not include work on avalanche control systems.

Includes snow poles, chain control signs, restricted parking signs, warning signs, seasonal signs, snow fences, snow gates, jet roofs, and all other fixed hardware relating to snow and ice. Includes work in the Maintenance Station to straighten and do other repairs to snow poles and signs.

Special Requirements

Installation of new signs or poles must be called in to the USA system for clearance.

Production Unit Calculation

Each unit worked on.

R40000 – CHAIN CONTROL

Production Unit: Hours

Purpose

All time spent working on staffed chain control activities.

Includes all time required to establish, operate, move, and close staffed chain controls.

Special Requirements

None

Production Unit Calculation

Hours

July 2005

**R50000 – SUPPORT PERSONNEL - ICE/SNOW
SUPPORT PERSONNEL****Production Unit:** None**Purpose**

Includes:

- All miscellaneous personnel costs associated with snow and ice.
- All staff time charges for cooks and cook's helpers.
- All staff time charges for Radio Operators and other staff assigned to snow and ice program.

Special Requirements

None

Production Unit Calculation

None

R90000 – ADMIN TIME OFF & SHORT SHIFT CHANGE**Production Unit:** Each occurrence**Purpose**

Includes:

- Any work relating to snow and ice that is not included in other programs.
- Administrative time off to facilitate short shift changes.
- Snow removal or storage at Maintenance facilities.

Note: Tasks that are associated with work operation such as fabricating or repairing snow chains, and changing plow and grader blades used for snow removal should be charged to the appropriate Activity, not to R90000.

Special Requirements

None

Production Unit Calculation

Each occurrence

July 2005

R90100 – AVALANCHE CONTROL MISCELLANEOUS

Production Unit: Each occurrence

Purpose

Includes:

- All time spent on avalanche control operations and maintenance of avalanche control systems.
- Avalanche control by using hand-charging method.
- Traffic controls set up to facilitate avalanche control operations.

Special Requirements

When using Gaz-Ex, use Special Designation **“MGAZEX”**.

All maintenance work (by State forces) on Gaz-Ez systems, use Special Designation **“MGAZEXM”**

When using LoCAT, use Special Designation **“MLOCAT”**.

All maintenance work (by State forces) on LoCAT systems, use Special Designation **“MLOCATM”**.

Production Unit Calculation

Each occurrence

July 2005

S FAMILY ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
S10000	SAND/ROCK PATROL	VEMI	Vehicle Miles	RW
S20000	STORM PATROL	VEMI	Vehicle Miles	RW
S20100	FLOOD CONTROL	EAOC	Each Occurrence	RW
S30000	EMERGENCY DAMAGE REPAIR	EAOC	Each Occurrence	RW
S30001	INSPECTION	VEMI	Vehicle Miles	RW
S30002	COMPLAINT INVESTIGATION	EAOC	Each Occurrence	RW
S30009	UNDERGROUND SERVICE ALERT	EAOC	Each Occurrence	RW
S30010	MINOR SLOPE DAMAGE REPAIR	EAOC	Each Occurrence	RW
S30011	REPAIR/REPLACE ROCK FALL PROTECTION	EAOC	Each Occurrence	RW
S30012	MINOR SLIDE/SLIP REMOVE/REPAIR	CUYD	Cubic Yard	
S30013	EROSION CONTROL	ACRE	Acre	RW
S30014	ROCK SCALING	ACRE	Acre	RW
S30015	BENCH CLEANING	EAOC	Each Occurrence	RW
S30016	BLASTING	EAOC	Each Occurrence	RW
S30100	CLEARING ROAD OF SAND/DEBRIS	EAOC	Each Occurrence	RW
S40010	MAJOR SLIDE/SLIP REMOVE/REPAIR	CUYD	Cubic Yard	RW

July 2005

S10000 – SAND/ROCK PATROL**Production Unit:** Vehicle miles**Purpose**

Patrolling highways for fallen rocks or sand drifts.

Use when sand or rock patrol is not related to storms.

Do not use for patrolling for storm damage. (See S20000).

Special Requirements

None

Production Unit Calculation

Odometer vehicle miles.

S20000 – STORM PATROL**Production Unit:** Vehicle miles**Purpose**

Patrolling highways during or immediately after storms, wildfires or earthquakes.

Do not use for patrolling for rock or sand drifts when there has been no storm, wildfire, or earthquake. (See S10000).

Special Requirements

None

Production Unit Calculation

Odometer vehicle miles.

July 2005

S20100 – FLOOD CONTROL

Production Unit: Each occurrence

Purpose

Immediate work to control or contain rising waters including sandbagging, temporary earth berms, or diversions.

Do not use for routine culvert and ditch clearing in non-flood conditions is not considered flood control. (See C5xxxx, C6xxxx, and C7xxxx).

Traffic control should be charged to support on the Additional tab of the Work Order when charging to this Activity and should not be considered “M” Family work.

Special Requirements

In cases of significant damage, Project Numbers must be assigned when reporting storm damage and other major damage in the Integrated Maintenance Management System.

See instructions following these “S” Family Activities regarding special reporting requirements for storm damage and other major damage, including when a Project Number is required.

Production Unit Calculation

Each unique site.

July 2005

S30000 – EMERGENCY DAMAGE REPAIR**Production Unit:** Each occurrence**Purpose**

Emergency repairs to the transportation facility when damaged by unforeseen sudden events, and cannot be classified under any other Activity.

Traffic control should be charged to support on the Additional tab of the Work Order when charging to this Activity and should not be considered “M” Family work.

Special Requirements

Storm damage and other major damage to any physical inventory item including roadbed, shoulder, guardrail, fence, delineation, signs, drainage, and landscape, should not be charged to the “S” Family. Charge to the appropriate Family and Activity along with the storm damage Project Number assigned to the site (if Project Number applicable).

In cases of significant damage, Project Numbers must be assigned when reporting storm damage and other major damage in the Integrated Maintenance Management System.

See instructions following these “S” Family Activities regarding special reporting requirements for storm damage and other major damage, including when a Project Number is required.

Production Unit Calculation

Each occurrence

July 2005

S30001 – INSPECTION**Production Unit:** Vehicle miles**Purpose**

Inspection (quality assurance) of on going “S” Family work. Inspecting highways for new undiscovered storm damage is considered S20000, “Storm Patrol”.

Special Requirements

See instructions following these “S” Family Activities regarding special reporting requirements for storm damage and other major damage.

Production Unit Calculation

Vehicle miles

S30002 – COMPLAINT INVESTIGATION**Production Unit:** Each occurrence**Purpose**

Investigation of complaints by the public related to storm damage or other catastrophic damage.

Do not charge time spent correcting the complaint to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

None

Production Unit Calculation

Each occurrence

July 2005

S30009 – UNDERGROUND SERVICE ALERT**Production Unit:** Each occurrence**Purpose**

Underground utility clearance and location when required by storm damage repairs or other catastrophic damage repairs.

Special Requirements

In cases of significant damage, Project Numbers must be assigned when reporting storm damage and other major damage in the Integrated Maintenance Management System.

See instructions following these “S” Family Activities regarding special reporting requirements for storm damage and other major damage, including when a Project Number is required.

Production Unit Calculation

Each occurrence

July 2005

S30010 – MINOR SLOPE DAMAGE REPAIR

Production Unit: Each occurrence

Purpose

Light slope grading, backfilling erosion and vegetation removal related to storms or other sudden natural event if the total cost is **less than** \$1,000 per site or continuous damage less than \$15,000 per mile.

If total cost will exceed \$1,000 per site, or \$15,000 per mile, see S40010, "Major Slide/Slip Remove/Repair".

Traffic Control should be charged to support on the Additional tab of the Work Order when charging to this Activity, and should not be considered "M" Family work.

Special Requirements

In cases of significant damage, Project Numbers must be assigned when reporting storm damage and other major damage in the Integrated Maintenance Management System.

See instructions following these "S" Family Activities regarding special reporting requirements for storm damage and other major damage, including when a Project Number is required.

Production Unit Calculation

Each occurrence

July 2005

S30011 – REPAIR/REPLACE ROCK FALL PROTECTION**Production Unit:** Each occurrence**Purpose**

Repair or replacement of facilities designed to control rock falls, such as rock fences or K-rail rock catchments.

Traffic Control should be charged to support on the Additional tab of the Work Order when charging to this Activity, and should not be considered “M” Family work.

Special Requirements

In cases of significant damage, Project Numbers must be assigned when reporting storm damage and other major damage in the Integrated Maintenance Management System.

See instructions following these “S” Family Activities regarding special reporting requirements for storm damage and other major damage, including when a Project Number is required.

Production Unit Calculation

Each occurrence

July 2005

S30012 – MINOR SLIDE / SLIP REMOVE / REPAIR**Production Unit:** Cubic yard**Purpose**

Removal or repair of landslides or slipouts when the total cost will be **less than** \$1,000 per site or continuous damage less than \$15,000 per mile. If more than \$1,000 or \$15,000 see S40010, "Major Slide/Slip Remove/Repair."

This Activity is intended specifically for slide and slipout repair including removal or importing of soil, debris, or rock.

Storm damage and other major damage to any physical inventory item including roadbed, shoulder, guardrail, fence, delineation, signs, drainage, and landscape, should not be charged to the "S" Family. Charge to the appropriate Family and Activity along with the storm damage Project Number (if Project Number applicable).

Traffic Control should be charged to support on the Additional tab of the Work Order when charging to this Activity, and should not be considered "M" Family work.

Special Requirements

In cases of significant damage, Project Numbers must be assigned when reporting storm damage and other major damage in the Integrated Maintenance Management System.

See instructions following these "S" Family Activities regarding special reporting requirements for storm damage and other major damage, including when a Project Number is required.

Production Unit Calculation

Cubic yards imported or exported.

July 2005

S30013 – EROSION CONTROL

Production Unit: Acre

Purpose

Treatment of freshly graded or eroded slopes to prevent erosion, but only if the bare slope is a direct result of storm damage or other catastrophic event.

Traffic Control should be charged to support on the Additional tab of the Work Order when charging to this Activity and should not be considered “M” Family work.

Special Requirements

In cases of significant damage, Project Numbers must be assigned when reporting storm damage and other major damage in the Integrated Maintenance Management System.

See instructions following these “S” Family Activities regarding special reporting requirements for storm damage and other major damage, including when a Project Number is required.

Production Unit Calculation

Acre

July 2005

S30014 – ROCK SCALING

Production Unit: Acre

Purpose

Removal of loose and potentially unstable rocks and boulders from slopes if the slope has been recently damaged by storms or other catastrophic events.

Traffic control should be charged to support on the Additional tab of the Work Order when charging to this Activity, and should not be considered “M” Family work.

Special Requirements

In cases of significant damage, Project Numbers must be assigned when reporting storm damage and other major damage in the Integrated Maintenance Management System.

See instructions following these “S” Family Activities regarding special reporting requirements for storm damage and other major damage, including when a Project Number is required.

Production Unit Calculation

Acre (Measured parallel to slope).

S30015 – BENCH CLEANING

Production Unit: Each occurrence

Purpose

Clearing of debris and material from pre-existing benches cut into slopes, when the debris and material is deposited by storms or weathering.

Traffic control should be charged to support on the Additional tab of the Work Order when charging to this Activity and should not be considered “M” Family work.

Special Requirements

See instructions following these “S” Family Activities regarding special reporting requirements for storm damage and other major damage

Production Unit Calculation

Each occurrence

July 2005

S30016 – BLASTING

Production Unit: Each occurrence

Purpose

Drilling and blasting of large boulders after rock fall. Also includes non-explosive methods, such as splitting boulders with expansive grout.

Traffic control should be charged to support on the Additional tab of the Work Order when charging to this Activity, and should not be considered “M” Family work.

Special Requirements

In cases of significant damage, Project Numbers must be assigned when reporting storm damage and other major damage in the Integrated Maintenance Management System.

See instructions following these “S” Family Activities regarding special reporting requirements for storm damage and other major damage, including when a Project Number is required.

Production Unit Calculation

Each occurrence

July 2005

S30100 – CLEARING ROAD OF SAND/DEBRIS**Production Unit:** Each occurrence**Purpose**

Clearing roadway of sand, debris, or minor mudflows.

Traffic control should be charged to support on the Additional tab of the Work Order when charging to this Activity, and should not be considered “M” Family work.

Special Requirements

In cases of significant damage, Project Numbers must be assigned when reporting storm damage and other major damage in the Integrated Maintenance Management System.

See instructions following these “S” Family Activities regarding special reporting requirements for storm damage and other major damage, including when a Project Number is required.

Production Unit Calculation

Each occurrence

July 2005

S40010 – MAJOR SLIDE/SLIP REMOVE/REPAIR**Production Unit:** Cubic yard**Purpose**

Response and restoration of major landslides, slipouts, washouts, and slope damage **when the total cost will exceed \$1,000 per site or \$15,000 per mile.**

This Activity is intended specifically for slide and slipout repair including removal or importing of soil, debris, rock, or slope damage which exceed the dollar limits stated above. If total costs will be less than \$1,000 per site or \$15,000 per mile, see Activity S30012 or S30010.

Storm damage and other major damage to any physical inventory item including; roadbed, shoulder, guardrail, fence, delineation, signs, drainage, and landscape, should not be charged to the “S” Family. Charge to the appropriate Family and Activity along with the storm damage Project Number.

Traffic control should be charged to support on the Additional tab of the Work Order when charging to this Activity, and should not be considered “M” Family work.

Special Requirements

When total Maintenance costs for a site will exceed \$1,000 per site or \$15,000 per mile, a storm damage Project Number is required, and must be site specific.

See instructions following these “S” Family Activities regarding special reporting requirements for storm damage and other major damage.

MULIPLE PROJECT NUMBERS

When more than one Project Number is required, the storm damage Project Number takes precedent and is entered in the Project Number field of the Work Order. The other Project Number must be entered in the Work Order Comments.

As an example: Storm damage pavement repairs (A1xxxx) total costs will exceed \$ 60,000, and require Major Maintenance approval and Project Number. The storm damage Project Number is entered in the Project Number field of the Work Order, and the Major Maintenance Project Number is entered in the Work Order Comments.

Production Unit Calculation

Cubic yards imported or exported.

SPECIAL REPORTING REQUIREMENTS FOR STORM DAMAGE AND OTHER MAJOR DAMAGE

“Storm Damage and Other Major Damage” includes all damage repairs and reopening related to natural disasters, catastrophes, or events such as storms, floods, wildfires, earthquakes, tsunamis (tidal waves), high surf, slope failures, or other geological phenomena. Response to man-made damage is included if it is on a large scale, such as riots, terrorism, or acts of war.

REPORTING STORM DAMAGE AND OTHER MAJOR DAMAGE IN IMMS

Accurate and uniform charging and documentation practices for disasters, severe storms, and large wildfires are essential to Maintenance. Proper charging practices are required to meet Federal regulations that specify minimum levels of cost tracking as a condition for receiving Federal disaster aid. Following established charging practices is critical to ensure full reimbursement from the Federal government when disaster aid programs are in effect. There is a direct relationship between the quality and accuracy of charging practices and the amount of funding that will flow back to district Maintenance.

Disaster declarations are often retroactive, so it is important to use correct charging practices at all times, whether or not a disaster is currently in effect.

PROJECT NUMBERS

Removal or repair at storm damage and other major damage sites require a Project Number when the total cost will exceed \$1,000 per site – or - continuous damage which will exceed \$15,000 per mile. “Total” means all costs combined for the specific site, not just the expenditures for one Activity.

When reporting significant storm damage and other major damage in the Integrated Maintenance Management System, damage locations must be reported “**site specific**”.

Project Number for storm damage or other major damage - - No Disaster Declared

- 1) Create a Work Order **for each major damage site**.
- 2) Assign the appropriate Project Number to each Work Order.
Usually, these Project Numbers are preloaded into the Project Number pop-up box. The standard coding is: **DDUSFY** where DD = district number, U = undeclared, S = storm, FY = last two digits of the current fiscal year. Example: 07US04 is District 07 undeclared storm damage in 2005/06 FY.

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Project Numbers for storm damage or other major damage - - Disaster Declared

If a State or Federal disaster is declared and the Office of Emergency Services (OES) issues a disaster number, the same procedures apply (photographs and one Work Order per specific damage site). Only the Project Number is changed (instead of DDUSFY) to DR-XXXX, where DR means "Disaster" and XXXX is the disaster number. When disaster has been declared, special instructions will be issued by Headquarters Maintenance regarding which DR Number to use and in which counties.

Multiple Project Numbers

When more than one Project Number is required, the storm damage Project Number takes precedent and is entered in the Project Number field of the Work Order. The other Project Number must be entered in the Work Order Comments.

As an example: Storm damage pavement repairs (A1xxxx) total costs will exceed \$ 60,000, and require Major Maintenance approval and Project Number. The storm damage Project Number is entered in the Project Number field of the Work Order, and the Major Maintenance Project Number is entered in the Work Order Comments.

IMMS ACTIVITIESTypes of work included in "S" Family Activities.

- Sand and rock patrol.
- Patrol following storms, wild fires, and earthquakes.
- Flood control including placing sandbags and other methods of diversion.
- Inspection of damage locations related to "S" Family.
- Complaint Investigation.
- Underground Service Alert.
- Minor slope damage repair.
- Rock fall protection
- Slide/slipout repair.
- Erosion control.
- Rock scaling.
- Bench cleaning.
- Blasting
- Clearing road of sand, debri, and mudflows. (Does not include sweeping or debri removal, which is considered routine maintenance or due to traffic accidents and spilled loads. See the "D" Family Activities).
- Major slides and slipouts.

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Types of work **not** included in the “S” Family Activities:

- 1) Spills
- 2) Damage due to vandalism or graffiti.
- 3) Damage due to common traffic accidents, including bridge hits.
- 4) Storm damage and other major damage to asset inventory such as pavement, fence, drainage, traffic guidance, and landscape. Repairs to these inventory items should be charged to the appropriate Family and Activity, **with the site specific storm damage Project Number.**

REPORTING TRAFFIC CONTROL IN IMMS FOR STORM DAMAGE AND OTHER MAJOR DAMAGE

Traffic Control should be charged as support on the Additional tab of the Work Order, using the appropriate Activity for the work performed.

Activity M90000 is normally used when traffic control cannot be charged in support of another Activity. As an example, when Maintenance forces provide traffic control at traffic accidents or incidents when there is no damage to State property, no spill, and no clean up required.

PHOTOGRAPHS

If your personal safety permits, take a photograph of the damage site prior to starting reopening or repair work. A photograph can make the difference between a site qualifying for reimbursement and not qualifying. Photos should be shared with the Maintenance Engineer and include a record of the location and date.

MAJOR DAMAGE RESPONSE OPTIONS

There are two phases to storm damage and other major damage response: Emergency Opening (EO) and Permanent Restoration (PR).

Emergency Opening is first responder operations at the damage site taken to secure safety for travelers and workers, re-open closed facilities to at least partial service, establishment of detours, traffic control, and prevention of additional damage if there is an immediate threat.

Permanent Restoration is repair work to restore the damaged facility to its pre-event condition. Improvements or betterments may be included as part of Permanent Restoration if the purpose of the improvement or betterment is to prevent recurring damage.

Strategies for responding and repairing damaged facilities include:

- (1) **State Forces.** The Maintenance crew(s) perform all reopening and repair activities with State forces and State equipment. This is commonly used for smaller damage sites (small slides, removing rockfall, debris removal, restoring shoulder backing, etc.).
- (2) **Split Strategy.** The Maintenance crew(s) perform EO activities to partially or fully reopen the facility. Once secured, the site is left unrepaired until a capital contractor completes the Permanent Restoration project at a later date. This is frequently used for larger damage locations.
- (3) **Combined Strategy.** The Maintenance crew(s) respond initially however, because the site is too large or costly, the EO is completed by a capital contractor (typically by Director's Order). The EO and PR are completed in one step by the same contractor. The combined strategy is only used when it is economically advantageous because there is no clear "break" between EO and PR. Example: a complete washout of the entire traveled way. Once the contractor restores subgrade it is usually more efficient to continue on to paving and striping, rather than trying to divide the work into a separate EO contract and PR contract.

MAJOR DAMAGE REPAIRS BY CONTRACT

The Department has mechanisms to fund major damage repairs by contract. Maintenance Supervisors and managers should use judgement to determine whether or not damage repairs are best done by capital contract. Damage repairs needing an engineered solution, would consume too much of a Maintenance crew's time (causing neglect of other needs in the area), or would require extensive equipment rental, and should be considered for completion by capital contract.

Types of contracts available are listed below for information only. Capital contracts are generally handled by the district office, except for equipment rental.
(See item number 3).

- (1) **Director's Orders.** Emergency contracts, approved by Headquarters, initiated by Maintenance but administered by Construction. See Deputy Directive DD-26R.
- (2) **Emergency Public Works Contracts** ("Minor B"). Emergency capital contracts below the cost threshold (currently \$120,000) for a Director's Order are delegated to the district. Refer to your district policies and procedures.
- (3) **Emergency Equipment Rental Contracts** These contracts may or may not be capital funded on case-by-case basis. May only be used for debris removal, basin cleanout, culvert unplugging, or non-engineered excavation/backfill. Do not use equipment rental contracts to construct repairs. These contracts do not have the correct legal boilerplate for general construction. Emergency equipment rental contracts may also include dump fees. State law requires that emergency equipment rental contracts have a term not exceeding 60 days.
- (4) **Form 42 Emergency Materials Procurement.** Innovative procurement-in-place methods may be made available following declared disasters. A Governor's Executive Order is generally required. Non-disaster Form 42 procurement is possible on a case-by-case basis, but requires Department of General Services approval via the Division of Procurement and Contracts.

TIMELY REPORTING OF DAMAGE

Immediate reporting of damage through your established chain of command is essential to ensure the most timely and efficient response. Refer to the *Emergency Operations Manual* for more information.

DAY LABOR LIMIT DOES NOT APPLY

State law prohibits State forces from performing certain types of project work in excess of \$25,000 per project. Storm damage and other major damage is not subject to this prohibition.

October 2006

GENERAL OPERATIONS DISTRICT OFFICE

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
T20010	REPAIRS/MAINTENANCE D.O.	NONE	None	FAC
T20011	ELECTRICAL REPAIRS D.O.	NONE	None	FAC
T20012	GROUNDS MAINTENANCE D.O.	NONE	None	FAC

GENERAL OPERATIONS REGION ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
T30010	REPAIRS/MAINTENANCE REGION OFFICE	NONE	None	FAC
T30011	ELECTRICAL REPAIRS – REGION OFFICE	NONE	None	FAC
T30012	GROUNDS MAINTENANCE REGION OFFICE	NONE	None	FAC
T30080	GENERAL OPERATIONS REGION OFF	NONE	None	FAC

MAINTENANCE FACILITIES ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
T40001	INSPECTION/COMPLIANCE	EAOC	Each Occurrence	FAC
T40002	COMPLAINT INVESTIGATION	EAOC	Each Occurrence	FAC
T40006	EMPLOYEE HOUSING MGT.	NONE	None	FAC
T40009	USA	EAOC	Each Occurrence	FAC
T40010	REPAIRS/MAINTENANCE	NONE	None	FAC
T40011	ELECTRICAL REPAIRS	NONE	None	FAC
T40012	GROUNDS MAINTENANCE	NONE	None	FAC
T40050	JANITORIAL	NONE	None	FAC
T40080	GENERAL OPERATIONS	NONE	None	FAC
T40090	RECEIVING/ISSUING MATERIALS	NONE	None	FAC

October 2006

T20010 – REPAIRS/MAINTENANCE – DISTRICT OFFICE**Production Unit:** None**Purpose**

Maintenance and repairs to district office to keep functioning and prevent depreciation. Compliance with State and local Fire Marshal, Water Quality Control Board, and OSHA regulations, and on-going preventative maintenance.

Work activities include the regular upkeep, repair, and alteration of buildings, facilities, and related equipment that is funded by Maintenance Division. Includes janitorial service, plumbers, laborers, carpenters, painters, and mechanics.

Do not use this Activity for:

- ELECTRICAL maintenance and repairs to district office (see T20011).
- GROUNDS, GARDENERS, PARKING AREAS at district office (see T20012).

Equipment preparation and work that is related to highway maintenance should be charged to the appropriate Maintenance Activity and not be charged to the T Family.

Special Requirements

- Use TRAMS Activity Code 052
- Charge to the facility where work is performed.

Production Unit Calculation

None

October 2006

T20011 – ELECTRICAL REPAIRS – DISTRICT OFFICE**Production Unit:** None**Purpose**

Electrical maintenance and repairs to keep the station functioning and maintain electrical and lighting safety.

Do not use this Activity for:

- Maintenance and repairs at district office that are not electrical (see T20010).
- GROUNDS, GARDENERS, PARKING AREAS at district office (see T20012).

Equipment preparation and work that is related to highway maintenance should be charged to the appropriate Maintenance Activity and not charged to the T Family.

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

None

October 2006

T20012 – GROUNDS MAINTENANCE – DISTRICT OFFICE**Production Unit:** None**Purpose**

Keeping the station compatible with the surrounding community including regular upkeep, repair, alteration of grounds, parking areas, sweeping, tree trimming, litter removal, etc. Includes gardeners, groundspersons, Maintenance employees, etc.

Do not use this Activity for:

- FACILITY maintenance and repairs at district office (see T20010).
- ELECTRICAL maintenance and repairs at district office (see T20011).

Equipment preparation and work that is related to highway maintenance should be charged to the appropriate Maintenance Activity and not be charged to the T Family.

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

None

October 2006

T30010 – REPAIRS/MAINTENANCE – REGION OFFICE**Production Unit:** None**Purpose**

Maintenance and repairs to keep the station functioning and prevent depreciation. Compliance with State and local Fire Marshal's, water quality control board's, and OSHA's regulations and on-going preventative maintenance.

Work includes the regular upkeep, repair, and alteration of buildings, facilities, and related equipment at the region office that is funded by Maintenance Division. Includes janitorial service, plumbers, laborers, carpenters, painters, and mechanics. This Activity is not intended for electrical or grounds related work.

Do not use this Activity for:

- ELECTRICAL maintenance and repairs at region office (see T30011).
- GROUNDS, GARDENERS, PARKING AREAS at region office (see T30012).

Equipment preparation and work that is related to Highway Maintenance should be charged to the appropriate Maintenance Activity and not be charged to the T Family.

Special Requirements

- Use TRAMS Activity Code 052
- Charge to the Facility where work is performed.

Production Unit Calculation

None

October 2006

T30011 – ELECTRICAL REPAIRS – REGION OFFICE**Production Unit:** None**Purpose**

Electrical maintenance and repairs to keep the station functioning and maintain electrical and lighting safety.

Do not use this Activity for:

- FACILITY maintenance and repairs at region office that are not electrical (see T30010).
- GROUNDS, GARDENERS, PARKING AREAS at region office (see T30012).

Equipment preparation and work that is related to highway maintenance should be charged to the appropriate Maintenance Activity and not be charged to the T Family.

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

None

October 2006

T30012 – GROUNDS MAINTENANCE – REGION OFFICE**Production Unit:** None**Purpose**

Keeping the station compatible with the surrounding community including regular upkeep, repair, alteration of grounds, parking areas, sweeping, tree trimming, litter removal, etc. Includes gardeners, groundspersons, Maintenance employees, etc.

Do not use this Activity for:

- FACILITY maintenance and repairs at region office (see T30010).
- ELECTRICAL repairs at region office (see T30011).

Equipment preparation and work that is related to highway maintenance should be charged to the appropriate Maintenance Activity and not be charged to the T Family.

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

None

October 2006

T30080 – GENERAL OPERATIONS REGION OFFICE GENERAL OPERATIONS REGION

Production Unit: None

Purpose

This Activity should be used when employee is performing tasks that are normally duties of region office staff. All work other than “office work” normally performed behind a desk should be charged to the appropriate Activity.

Equipment preparation and work that is related to highway maintenance should be charged to the appropriate Maintenance Activity and not be charged to the T Family.

Special Requirements

Use TRAMS Activity Code 003.

Production Unit Calculation

None

T40001 TREATMENT SYSTEMS MAINTENANCE FACILITIES

Production Unit: Each occurrence

Purpose

Service and maintain treatment systems or other mitigation measures such as general maintenance of wash rack area separators, clarifiers and evaporative units.

Do not use for storm water structural treatment BMPs. Maintenance of storm water structural treatment BMPs is charged to F7 Activities.

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

Each occurrence

October 2006

T40002 – COMPLAINT INVESTIGATION MAINTENANCE FACILITIES

Production Unit: Each occurrence

Purpose

Respond to complaints about Maintenance Facilities from local agencies and neighbors.

Complaints should be directly related to Maintenance Facility. Complaints related to the highway should be reported to the appropriate Complaint Investigation Activity.

If investigation results in performing repair/maintenance to the facility, do not charge the actual work to this Activity. Charge to the appropriate Activity for the work performed.

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

Each occurrence

T40006 – EMPLOYEE HOUSING MAINTENANCE FACILITIES

Production Unit: None

Purpose

Housing is provided in remote areas when the available housing market is scarce. Repair and upkeep to make the units tenantable and maintain their market value.

Special Requirements

Use TRAMS Activity Code 052.

Production Unit Calculation

None

October 2006

T40009 – USA MAINTENANCE FACILITIES

Production Unit: Each occurrence

Purpose

Locate on-site utilities as a pre-requisite for any underground excavation.

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

Each occurrence

October 2006

T40010 – REPAIRS/MAINTENANCE MAINTENANCE FACILITIES

Production Unit: None

Purpose

Maintenance and repairs to keep the station functioning and prevent depreciation. Compliance with State and local Fire Marshal's, water quality control board's, and OSHA's regulations and on-going preventative maintenance.

Work includes the regular upkeep, repair, and alteration of buildings, facilities, and related equipment that is funded by Maintenance Division. Includes plumbers, laborers, carpenters, painters, and mechanics. This Activity is **not** intended for electrical or grounds related work.

Do not use this Activity for:

- ELECTRICAL maintenance and repairs (see T40011).
- GROUNDS, GARDENERS, PARKING AREAS (see T40012).
- Work performed at the district office or region office (see T2xxxx and T3xxxx Activities).

Equipment preparation and work that is related to highway maintenance should be charged to the appropriate Maintenance Activity and not be charged to the T Family

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

None

October 2006

T40011 – ELECTRICAL REPAIRS MAINTENANCE FACILITIES

Production Unit: None

Purpose

Electrical maintenance and repairs to keep the station functioning and maintain electrical and lighting safety.

Do not use this Activity for:

- MAINTENANCE FACILITY and repairs that are not electrical (see T40010).
- MAINTENANCE FACILITY GROUNDS MAINTENANCE (see T40012).
- Work performed at the district office or region office (see T2xxxx and T3xxxx Activities).

Equipment preparation and work that is related to highway maintenance should be charged to the appropriate Maintenance Activity and not be charged to the T Family.

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

None

October 2006

T40012 – GROUNDS MAINTENANCE MAINTENANCE FACILITIES

Production Unit: None

Purpose

Keeping the station compatible with the surrounding community including regular upkeep, repair, alteration of grounds, parking areas, sweeping, tree trimming, litter removal, etc. Includes gardeners, groundspersons, Maintenance employees, etc.

Do not use this Activity for:

- FACILITY (buildings/structures) maintenance and repairs (see T40010).
- ELECTRICAL (see T40011).
- Work performed at the district office or region office (see T2xxxx and T3xxxx Activities).

Equipment preparation and work that is related to Highway Maintenance should be charged to the appropriate Maintenance Activity and not be charged to the T Family.

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

None

October 2006

T40050 – JANITORIAL/CUSTODIAL MAINTENANCE FACILITIES

Production Unit: None

Purpose

Housekeeping to keep the station functioning, clean, and sanitary.

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

None

T40080 – GENERAL OPERATIONS MAINTENANCE FACILITIES

Production Unit: None

Purpose

Investigating utility billing or preparing utility billing documents.
Call outs in response to burglar alarms at Maintenance facilities.

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

None

October 2006

T40090 – RECEIVING/ISSUING MATERIALS MAINTENANCE FACILITIES

Production Unit: None

Purpose

Use this Activity for Maintenance Supervisors and employees, receiving or issuing materials to maintain roads at a Maintenance facility.

Do not use for warehouse employees assigned to a district warehouse. District warehouse employees entering their time in IMMS should use the Non-Work Order (Labor Other) code of T MAT. (See Chapter 2, Section 2.10).

Special Requirements

- Use TRAMS Activity Code 052.
- Charge to facility where work is performed.

Production Unit Calculation

None

TRAINING AND FIELD AUXILIARY SERVICES ACTIVITIES

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
W10000	LEGALLY MANDATED TRAINING	NONE	None	FAC
W20000	KINGVALE MAINTENANCE ACADEMY	NONE	None	FAC
W30000	META	NONE	None	FAC
W40000	OTHER TRAINING	NONE	None	FAC
W50000	FIELD AUX SVCS (STATE VEHICLE)	NONE	None	FAC
W90000	MISC (EXAM PREP,SUP/MTG, GRIEV.	NONE	None	FAC

July 2005

W10000 – LEGALLY MANDATED TRAINING

Production Unit: None

Purpose

Legally mandated training required by Federal or local law. This includes: OSHA mandated Tailgate Safety Meeting held every ten working days, Maintenance Field Defensive Driver Training (MFDDT), CPR, First Aid, Pesticide Safety, Supervisor Training, Forklift, Confined Spaces, Sexual Harassment, Blasting, Chain Saw, Tree Worker Safety and Rescue, Maintenance Employee Safety, Orientation, and Substance Abuse.

Do not use this Activity for:

- META charges (see W30000).
- Equipment Qualification (see W30000).
- Electrical Maintenance Training Center charges (see W40000).
- Storm Water Orientation/Training (see F10006).

Special Requirements

Unless special coding otherwise provided :

- For Course Development use Special Designation **MA342** and TRAMS Activity Code **058**.
- Instructors use Special Designation **MA343** and TRAMS Activity Code **058**.
- Students use TRAMS Activity Code **059**.
- Safety meetings including Tailgate Meetings use TRAMS Activity Code **049**.

Production Unit Calculation

None

W20000 – KINGVALE MAINTENANCE ACADEMY

ACTIVITY W2000 HAS BEEN TEMPORARILY EXPIRED DUE TO THE KINGVALE MAINTENANCE ACADEMY BEING DISCONTINUED.

July 2005

W30000 – Maintenance Equipment Training Academy-META**Production Unit:** None**Purpose**

The Maintenance Equipment Training Academy (META) delivers mandated equipment safety and responsibility training to various Maintenance classifications at the McClellan Park facility. Use this Activity for all META training including the Equipment Management Responsibility (EMRC) course, the CEO Basic Responsibility course, the Maintenance Worker Basic Responsibility course, and the Caltrans Maintenance Equipment Training Simulator (CMETS).

Special Requirements

Students shall use this Activity with their respective district and cost center coding. META is located at the Maintenance Training Academies, McClellan, CA. Dormitories are provided for student housing while attending META. Reimbursement for lodging expenses is not authorized. Students are entitled to reimbursement for meals and incidentals **only** while attending META.

- For Course Development use Special Designation **MA342** and TRAMS Activity Code **058**.
- Instructors use Special Designation **MA343** and TRAMS Activity Code **058**.
- Students use TRAMS Activity Code **059 ONLY**.

- For Equipment Qualifier training (**train the Qualifier**) use Special Designation MQUAL and TRAMS Activity 059.

Note : Do not charge to W30000 for actual Equipment Qualification.

For Qualifier and trainee, charge to Family Problem related to maintenance work performed that day and use Special Designation MQUAL. Use TRAMS Activity 036. Include in Work Order Comments the name of employee qualified, and type of equipment qualified or trained on. Use TRAMS Activity Code 036.

Production Unit Calculation

None

October 2006

W40000 – OTHER TRAINING**Production Unit:** None**Purpose**

All other training not listed in W10000, W20000, or W30000 Activities.

On the job training should be charged to the appropriate Activity, not to the W Family.
This includes Equipment training and Qualification.

Note: For META charges see W30000.

Special Requirements

Unless Special coding otherwise provided :

MA342 Course Development use Activity Code **058**.

MA343 Course Instructors use Activity Code **058**.

Students use Activity Code **059**.

For ELECTRICAL MAINTENANCE TRAINING CENTER use Special Designation **MEMTC**.

Instructors use Activity Code **058**.

Students use Activity Code **059**.

Production Unit Calculation

None

October 2006

W50000 – FIELD AUXILIARY SERVICES

Production Unit: None

Purpose

Field Auxiliary Services in support of Maintenance.

Special Requirements

- Time for emergency transportation of employee for first medical contact for job-related injury (on the day of injury only) regardless of the day of the week..
Subsequent treatment should be charged to Sick Leave or other appropriate Employee time.
Use TRAMS Activity Code 099.
- Modified work time that could not be charged to a specific Activity
Use TRAMS Activity Code 099.
- Drug testing
Use Special Designation 6DRGTST and TRAMS Activity Code 083.
- Time for job required Physical Examinations and Licensing
Use TRAMS Activity Code 099.
- Release time for State Civil Service Exams exams, and interviews when scheduled during employee's normal work hours.
Use TRAMS Activity Code 099.
Note : **Do not** charge to W50000 when working on exam preparation or as member of panel.
See W90000.
- Time as a subpoenaed witness for a matter not related to State business if the employee is not a party to the suit. Use TRAMS Activity Code **099**. Otherwise, the employee must use vacation, CTO, or other time off.

Please see below for charging time specifically for LEGAL tort cases as a witness.

Chg District: 1-12 (District where the accident occurred)

EA: 937500

Subjob: 3LEGL

Special Designation : Provided by the attorney

FAE: 2

Activity: Use TRAMS Activity Code 003

Production Unit Calculation : None

October 2006

W90000 – MISC**Production Unit:** None**Purpose**

Miscellaneous not defined in other W Activities. Includes examination preparation and Certificate testing, supervisor meetings, employee relations, and grievances.

Special Requirements

Exams :

Chairperson use TRAMS Activity Code 014.

Consulting / Advisor use TRAMS Activity Code 015.

When serving as panel member use TRAMS Activity Code 016.

Note : **Do not** charge time taking Civil Service Exam or attending interview to this Activity. See **W50000**.

For supervisor meetings use TRAMS Activity Code **002**

Employee Relations & Grievances:

Certified Union Stewards in official capacity at meetings, MOU writings or as representatives use TRAMS Activity Code **080**.

Employees at disciplinary hearings use TRAMS Activity Code **099**.

Scheduled meetings with Labor Union representatives during normal working hours. For example, meeting with rank and file crew members. Use TRAMS Activity Code **099**.

Employees who participate in AA/EO program activities are to use TRAMS Activity Code 075.

Production Unit Calculation

None

July 2005

WORK FOR OTHERS

ACTIVITY	DESCRIPTION	PRODUCTION UNIT		ASSET
Y10000	ASSIST MECHANIC	NONE	None	FAC
Y20000	EQUIP SERVICING	NONE	None	FAC
Y30000	TRANSPORT EQUIP	NONE	None	FAC
Y40000	WORK FOR COMMUNICATIONS	NONE	None	FAC,RW
Y50001	INSPECTION – PERMITS	NONE	None	RW
Y50002	ADMINISTRATION – PERMITS	NONE	None	RW
Y50005	ADMINISTRATION – PERMITS	NONE	None	RW
Y50006	REVIEW – PERMITS	NONE	None	RW
Y50101	INSPECT/ADMIN EXCESS LANDS	NONE	None	RW
Y90000	SNOW REMOVE SNOPRK	NONE	None	RW
Y91000	ILLEGAL SIGN REMOVAL	EACH	Each	RW
Y92000	ASSIST/WORK FOR	NONE	None	FAC,RW

July 2005

Y10000 – ASSIST MECHANIC WORK FOR OTHERS

Production Unit: None

Purpose

All assistance to equipment mechanic and minor repairs on "C" type equipment.

Special Requirements

District Shop Superintendent approval is required for each individual repair before charging to Y10000. This applies only to "C" type equipment units. Not for use with district owned or rented equipment.

Charge District - Your District
Expenditure Authorization 943055
TRAMS Activity Code 064

Production Unit Calculation : None

Y20000 – EQUIP SERVICING WORK FOR OTHERS

Production Unit: None

Purpose

All assistance to equipment mechanic for servicing of "C" type equipment.

Special Requirements

Applies only to "C" type equipment units. District Shop approval is required before charging Y20000.

Charge District – Your District
Expenditure Authorization 943055
TRAMS Activity Code 064

Production Unit Calculation

None

Y30000 – TRANSPORT EQUIPMENT WORK FOR OTHERS

Production Unit: None

Purpose

Transporting "C" type equipment to and from repair facilities. This includes low bed transport truck driver when moving equipment as requested by the District Shop Superintendent.

Special Requirements

District Shop Superintendent approval is required for each occurrence before charging to Y30000. Applies to only "C" type equipment. Not to be used when transporting district owned or rented equipment.

Charge District - Your District
Expenditure Authorization 943055
TRAMS Activity Code 064

Production Unit Calculation

None

Y40000 – WORK FOR COMMUNICATIONS WORK FOR OTHERS

Production Unit: None

Purpose

Limited to maintenance activities needed to enable technicians access to radio vaults at remote sites. This includes maintenance work on access roads, and fixtures, such as power plants, fuel tanks, fences, landscaping, and trash receptacles.

Do not use this Activity for the operation, repair or servicing of any type of electronic telecommunication equipment such as repeaters, etc.

Special Requirements

Charges to Y40000 can only be reported after prior approval has been obtained from the Chief, Office of Telecommunications in Headquarters. An Expenditure Authorization, Charge District, Special Designation, Federal-Aid Eligibility Code, and TRAMS Activity Code will be furnished by calling CalNet 464-5642.

Production Unit Calculation

None

Y50001 – INSPECTION – PERMITS WORK FOR OTHERS

Production Unit: None

Purpose

Limited to field inspections related to the issuance of encroachment permits or Transportation Permits.

Special Requirements

Charges to Y50001 can only be reported after prior approval has been obtained from the District Permit Engineer. An Expenditure Authorization, Charge District, Federal-Aid Eligibility Code, and TRAMS Activity Code will be furnished by the Permit Engineer.

Production Unit Calculation : None

July 2005

Y50005 – ADMINISTRATION – PERMITS WORK FOR OTHERS

Production Unit: None

Purpose

Limited to maintenance activities such as administration or supervision related to the issuance of encroachment permits or Transportation Permits.

Special Requirements

Charges to Y50005 can only be reported after prior approval has been obtained from the District Permit Engineer. An Expenditure Authorization, Charge District, Federal-Aid Eligibility Code, and TRAMS Activity Code will be furnished by the Permit Engineer.

Production Unit Calculation

None

Y50006 – REVIEW – PERMITS WORK FOR OTHERS

Production Unit: None

Purpose

Limited to maintenance activities such as review or field work related to the issuance of encroachment permits or Transportation Permits.

Special Requirements

Charges to Y50006 can only be reported after prior approval has been obtained from the District Permit Engineer. An Expenditure Authorization, Charge District, Federal-Aid Eligibility Code, and TRAMS Activity Code will be furnished by the Permit Engineer.

Production Unit Calculation

None

July 2005

**Y50101 – INSPECT/ADMIN EXCESS LANDS
WORK FOR OTHERS****Production Unit:** None**Purpose**

To capture cost incurred while performing work on excess land for Caltrans Division of Right of Way. This includes inspections and collecting rent and fees. Work for Right of Way such as cleaning, debris removal, weed / brush removal shall be charged to the appropriate Activity performed using appropriate Expenditure Authorization and TRAMS Activity Code provided by Right of Way.

Special Requirements

An Expenditure Authorization is required. The proper EA, Charge District, Federal Eligibility Code, and TRAMS Activity Code must be used. Right of Way will provide this information.

Production Unit Calculation

None

July 2005

Y90000**SNO-PARK SNOW REMOVAL / SIGN INSTALLATION AND MAINTENANCE****Production Unit:** None**Purpose**

To capture cost for snow removal and sign installation and repair within individual SNO-PARK locations.

Special Requirements

Snow removal at SNO-PARKs requires use of Expenditure Authorization 926603 with a Charge District of 56. Use Federal Aid Eligibility Code 1, TRAMS Activity Code 038. Special Designation is required. See the following page for list of SNO-PARK Special Designations.

Repair and installation of signs off the right of way at SNO-PARKs require use of Expenditure Authorization 926602 with a Charge District of 56. Use Federal Aid Eligibility Code 1, TRAMS Activity Code 038. A Special Designation is required. See the following page for a list of SNO-PARK Special Designations.

* SNO-PARK signs on the State right of way should be charged as normal sign (see Activities M4xxxx).

Production Unit Calculation

None

July 2005

Y90000**SNO-PARK SNOW REMOVAL / SIGN INSTALLATION AND MAINTENANCE****CONTINUED FROM PREVIOUS PAGE****SNO-PARK SPECIAL DESIGNATIONS:**

Required to capture costs for individual SNO-PARK locations, use the following:

<u>DISTRICT</u>	<u>LOCATION</u>	<u>CO-RTE</u>	<u>SPECIAL DES.</u>
03	Yuba Pass	13-049	MSP01
03	Blackwood Canyon	19-089	MSP02
03	Echo Summit	25-050	MSP03
03	Echo Lake	25-050	MSP04
03	Taylor Creek	25-089	MSP05
03	Castle Peak Interchange	17-080	MSP13
03	Cisco Grove Interchange	19-080	MSP14
03	Donner Memorial Park	17-080	MSP17
06	Balsam Meadow	42-168	MSP07
06	Coyote	42-168	MSP08
06	Eastwood Visitor Center	42-168	MSP09
06	Tamarack	42-168	MSP10
06	Huntington Lake	42-168	MSP16
09	Rock Creek	47-395	MSP19
10	Alpine Lake	31-004	MSP11
10	Carson Pass	31-088	MSP12
10	Iron Mountain	26-088	MSP15
10	Meiss Meadow	31-088	MSP20

July 2005

Y91000 – ILLEGAL SIGN REMOVAL WORK FOR OTHERS

Production Unit: Each

Purpose

To capture cost incurred in the removal and storage of illegal signs when following Removal Orders issued from the Department's Office of Outdoor Advertising (ODA). Prior approval from the Office of Outdoor Advertising is required to use this Activity.

Special Requirements

A valid Expenditure Authorization, Charge District, Federal Aid Eligibility Code 1, and TRAMS Activity Code 038 are required, and must be provided on the Removal Orders. To find a list of the District ODA Coordinators see "Outdoor Advertising" on the Caltrans Homepage.

Production Unit Calculation

Each Removal Order.

Y92000 – ASSIST/WORK FOR CONSTRUCTION/DESIGN WORK FOR OTHERS

Production Unit: None

Purpose

To capture cost related to work on Construction projects. This includes planning and design reviews, traffic control for construction and design crews such as drill and pavement evaluation crews, and emergency work within Construction projects.

Special Requirements

A valid Expenditure Authorization, Charge District, Federal Aid Eligibility Code, and TRAMS Activity Code are required, and must be provided by Construction or Design. Because Construction EA's are often multi-phase, it is important that you verify all EA's with your District IMMS Coordinator before any work has begun. It is important to complete Work Orders promptly to insure the provided EA is in the proper phase for Maintenance billing. Failure to follow this procedure may result in an inability to recover expenditures.

Production Unit Calculation: None